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On The Cover
The BlackBerry Tour, Apple iPhone 3G S, and Nokia E71x are three smartphones that can benefit from the apps featured in this month's cover stories.

Mobile Software

If there's something you want to do with your mobile phone, chances are there's an app out there to help you out. For this month's featured articles, we waded through the huge crop of mobile software on the market today and whittled down the results to those we think you'll appreciate the most.

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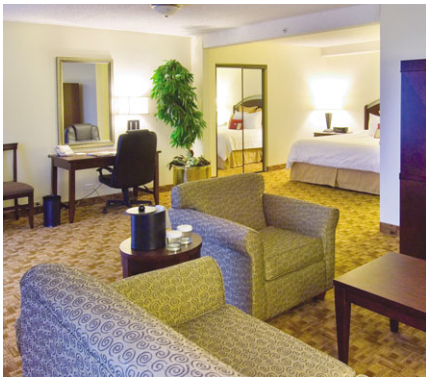

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NUMBERS

by Calvin Clinchard

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One of every two mobile phones sold will be a smartphone within the next three or four years, Marvell Technology Group's CEO Sehat Sutardja told Reuters in May. Shortly after that, smartphones will take the No. 1 spot among mobile phones, Sutardja added, claiming as much as 90% of the market within six or seven years.

13 Million

Not only did netbook manufacturers sell more than 13 million of those miniature notebooks in 2008, but the market will continue to grow. Furthermore, according to Pyramid Research, netbook sales will drive mobile broadband usage sky-high, with more than half of all netbooks bundled for sale with wireless subscriptions by 2014.

1 Billion

Revenues from the Amazon Kindle grew from $5 million to $117 million between 2007 and 2008, and there seems to be no stopping the ereader's success. Piper Jaffray expects revenues to reach $405 million by year's end and fall just shy of the $1 billion mark in 2010.

IMAGE COURTESY OF APPLE

40

If you're looking for signs that the Internet is going mobile in a big way, consider iPhone users. According to research from AdMob, 40% of iPhone users access the Web on that device more often than on a desktop or notebook computer.

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A recent Webcredible poll of 1,100 Web users found that 39% use the mobile Internet chiefly to check email, up from 21% in 2007. Social networking was the second most popular mobile Web activity, with 16% of respondents using their mobile phones mainly for that.

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In contrast to other recent research suggesting that Brits don't care much about mobile phone recycling, Internet search analysis from Hitwise indicates that interest in phone recycling in the UK rose 189% from May 2008 to May 2009.

73.4 Million

It's true, your phone will soon double as your credit card. According to research firm Gartner, there will be 73.4 million people using mobile phone payment systems worldwide by the end of this year, a significant increase over the 43.1 million people who made mobile payments in 2008.

Compiled by Blaine Flamig

Noteworthy

Extra! Extra! Get Your Sockscription

After a 10-year run in Europe in which Blacksocks (www.blacksocks.com) sold more than 1 million socks to foot-covering buyers, the company recently entered the U.S. market complete with its Sockscription feature. After selecting your choice of calf, business light, sneaker, knee, or cashmere socks, Blacksocks will send three pairs at intervals you designate, say, three times a year. Sockscriptions start at $69. To date, 40,000 subscribers from 74 countries have placed orders, Blacksocks claims.

Top CEOs Say "Eh" To Twitter & Facebook

What do *Fortune*'s 2009 Top 100 CEOs think about Twitter, Facebook, and social networking in general? Apparently, not much. Recent UberCEO.com research shows not even one Top 100 CEO owns a blog, only two have Twitter accounts, and roughly 80% are MIA from Facebook. Although 13 have LinkedIn profiles, only three have more than 10 connections. UberCEO.com cites fear, lack of knowledge, and time constraints as reasons for nonparticipation but adds, "With the public already skeptical about large corporations, CEOs can't afford to pretend that social media is not for them."

Costa Rica Is The Place To Be

Seeking that perfect Eden where you can live the most average years of happiness? Head to Latin America. According to the New Economics Foundation's Happy Planet Index (www.happyplanetindex.org), nine of the top 10 happiest countries are located in the region. Costa Rica rated first in the index—which measured high life expectancy, high life satisfaction, and low ecological footprint target factors in 143 countries where 99% of the world's population resides—followed by the Dominican Republic and Jamaica. The United States? 114. Ouch.

VIP's Clear Customers Dealt Service-Ending Blow

If you were considering Verified Identity Pass' Clear service to speed your way through airport security checkpoints, forget it. VIP announced in late June it's folding the business after failing to "negotiate an agreement with its senior creditor." VIP reportedly collected biometric data from roughly 260,000 customers but stated at www.flyclear.com it's protecting that data in compliance with TSA standards. Unfortunately, those who've already shelled out $199 for the service shouldn't expect a refund "due to the company's financial condition."

How Much For Your Apps?

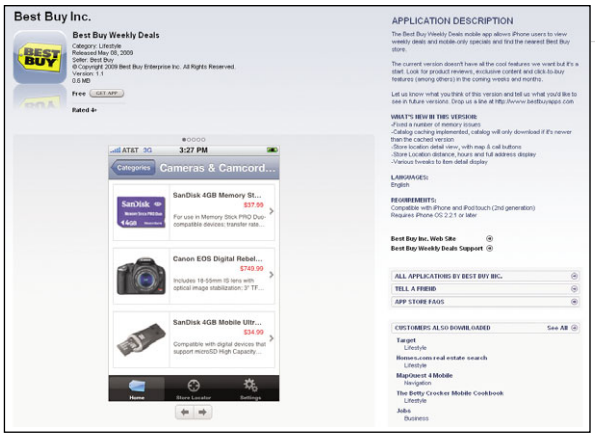
Hypothetically, let's say you really love iPhone apps to the point you're willing to buy all 55,732 available as of July 6, 2009. How much would it cost you? According to Busted Loop (bustedloop.com/blog), which actually did the math, you'd fork over a cool $144,326.06, spending an average of $2.59 per app when taking free apps (12,538) out of the equation. $16,427.94 of your money would go to Iceberg Reader, which has 1,206 paid apps available.

Mobile Web Browsing Exploding

As part of a lead-up to its Sept. 16 to 17 Mobile Strategies in Travel Conference in Chicago for travel-industry companies, EyeForTravel (www.eyefortravel.com) detailed that in the three months leading up to Christmas 2008, "the average number of Americans who browsed the Internet via their mobile phones grew by 61.5% from the same period in 2007." Further, EyeForTravel states that although no one knows what the next mobile killer app will be, "over one-third of Web-savvy travel companies" invested in mobile initiatives in 2009.

Eznex Goes Hands-Free With EzCube

Road warriors who make the rounds via automobiles will tell you that the last thing they need is another gadget taking up interior car space. Still, although South Korean company Eznex's ENA7000 EzCube FM transmitter (about $35; www.eznex.co.kr) lacks mounting or device-charging abilities, it's only roughly the size of a Las Vegas craps die, integrates a rechargeable Lithium-polymer battery, works with any MP3 player, and can broadcast hands-free conversations over a car stereo.



Best Buy Goes Mobile With Weekly Deals

Checking Best Buy's Weekly Deals just got easier with the mega-retailer's recent launch of a mobile app for iPhones and the iPod touch. Beyond detailing weekly deals, the app, available at the Apple App Store, includes mobile-only specials and will help those away from their home turf find the nearest Best Buy store. Though the "current version doesn't have all the cool features we want," Best Buy states, users can "look for product reviews, exclusive content, and click-to-buy features" coming soon.

Travel Association Props Up Travel Promotion Act Of 2009

U.S. Travel Association CEO Roger Dow recently praised the Travel Promotion Act of 2009, which Rep. William Delahunt (D-Mass.) and Rep. Roy Blunt (R-Mo.) introduced in the U.S. House of Representatives (a companion bill is under consideration in the Senate), stating, "At no cost to American taxpayers, this common-sense legislation will help to create thousands of jobs and strengthen communities from coast-to-coast." The act would create a private-public partnership that promotes international travel to the U.S., plus charge foreign travelers who don't pay $131 for a visa and a $10 fee to touch U.S. ground. Oxford Economics estimated the act could net 1.6 million international travelers per year, translating into $4 billion in new spending annually and $321 million in new federal tax revenue.

Energizer Powers Up Portable Battery Line

By now, the company behind the bunny that won't stop beating that infernal drum should have expanded its Energizer Energi To Go line via a partnership with XPAL Power to include Lithium-polymer-based iPhone 3G/3GS battery sleeves ($49.99 and $79.99); solar chargers ($49.99 and $99.99); and battery packs ($69.99 to $199.99) that can simultaneously charge multiple devices. Further, "to ensure ongoing compatibility with new and emerging devices," Energizer (www.energizer.com) is launching an online tip finder.

Tech To Watch

Microsoft Silverlight

Today's Internet is a massive repository of multimedia and interactivity. Everywhere you browse, from the eye- and ear-pleasing Netflix Movie Viewer, Photobucket, and Pandora to virtual wallet-lightening and brain-teasing online poker and Sudoku sites; from obnoxious advertisements in the margins to the streaming video highlights from your favorite news sites; from the Web-based applications that keep you productive online and off to rich interactive experiences that defy classification: Nothing on the Web is immune to a prescription strength dose of audio and video. But there are just a handful of technologies behind all that streaming, blinking, noisome stuff that makes the Internet such a dynamic place to do business, communicate, and spend your leisure time. Microsoft's Silverlight is one of them.

Silverlight is Microsoft's cross-browser, cross-platform Web browser plug-in that enables rich multimedia features to appear in Web pages, much like Adobe's Flash Player. Silverlight supports Windows and Mac platforms and is compatible with Microsoft Internet Explorer, Apple Safari, and Mozilla Firefox browsers. Microsoft is working with Novell to create a Silverlight equivalent for Linux distributions called Moonlight. The software company is also busy creating a version that supports Windows Mobile 6 and Symbian S60 phones.

Microsoft designed the platform to stream media, including MP3, WMA, WMV7, WMV8, and WMV9/VC-1 streams and deliver a consistent user experience regardless of the browser or platform upon which it is executed. The Silverlight plug-in is free. If you don't have the plug-in, Microsoft will prompt you to download and install it, a task that requires just a few seconds. After you install the plug-in, Silverlight is capable of reading data, updating the user interface, and scaling video quality between resolutions suitable for mobile and desktop browsers as well as 720p HDTV. Silverlight also makes it possible to manipulate graphics from within your browser window. In short, Silverlight provides Web application developers with all the tools necessary to design interactive user interfaces, program basic controls, display graphics and animation, initiate and control media playback, among other things, to create rich experiences on Web sites. Developers can also use Visual Studio for coding Silverlight applications and Microsoft Expression Blend to do the layout and graphics work.

The key to the success of a platform such as Silverlight is in its ability to be completely invisible to the end user. Microsoft hopes that as Web developers begin to deliver richer and more fun Web experiences, end users will find new reasons to keep visiting Silverlight-embedded sites regularly.

By the time you read this, Silverlight 3.0 will be available, and with it comes a handful of updates that will put it in direct competition with Adobe's ubiquitous Flash Player. Silverlight 3.0 adds new controls; support for linking directly to specific pages within Silverlight applications; and support for Out-Of-Browser experiences, meaning that users can download and install Silverlight apps on their PCs for offline access.

by Andrew Leibman

Five Reasons To Watch Microsoft Silverlight

- Enables interactive multimedia experiences from within your Web browser
- Supports Windows and Mac platforms in Internet Explorer, Firefox, and Safari browsers; Opera support coming soon
- Used in popular Web applications such as AOL Mail RIA (Rich Internet Application)
- You can watch streaming videos, including more than 12,000 Netflix movies and TV shows
- You can broadcast live sporting events over the Web

At the 2009 International CES trade show, Steve Ballmer touted the features of the upcoming Windows Mobile 6.5 but only hinted at what users can expect with Windows Mobile 7.

A Look Ahead Windows Mobile 7

In April 2008 at the Microsoft MVP Global Summit in Seattle, Microsoft CEO Steve Ballmer told attendees, "The work we're doing on Windows Mobile 7, which is the next major release of Windows Mobile . . . in the development platform; the email, the backend; I think you'll continue to see that as an area of major excitement and innovation." In March 2009, at the International CTIA Wireless trade show, Microsoft's entertainment and devices president Robbie Bach announced that top names, ranging from fashion designer Isaac Mizrahi to information gurus Associated Press and Zagat Survey, had signed on to create products for Windows Mobile.

These announcements make good fodder for the media, but what do they mean for those of us using Windows Mobile devices? WM6.5, an interim release before the "next big thing" of WM7, passed out of beta phase in February 2009, so we should see it before the year concludes. WM7, however, is still playing roadrunner to mobile phone users' coyote, slipping over the horizon each time we hope to catch a glimpse of it.

Microsoft partners (and the tech media) originally speculated WM7 would be out by early 2009. More recently, Ballmer told financial analysts that Microsoft would release the OS early in 2010. So, what can we expect when it finally arrives? At press time, Microsoft had released no details about this "major release." Nevertheless, a quick look at the announcements for WM6.5, the current market, and leaked details circulating about WM7 permit a reasonable conjecture. (Details leaked in 2008, of which there were many instances, will likely become realized in WM6.5, if at all, so we bypassed them.)

A leaked "Chassis Specifications" document from May 2009 indicated certain requirements. These include Nvidia graphics (for glorious color and fast screen rendering); WVGA (800 x 480) or FWVGA (854 x 480) display quality, indicating a propensity for full-screen (PocketPC-style) devices; a more powerful battery; and a 3MP camera (flash is optional, but we hope to see one). Communication capabilities listed include A-GPS (required in all new devices; the question will be if the user can access it), 20Mbps USB, Bluetooth 2.1, and 802.11b/g (Wi-Fi). The sync and charge connector will be Micro USB.

Keep in mind that these leaked details may not match the final version. However, given that they align with what we're already seeing from Apple and Research In Motion, we'd bet they're generally on target.

For WM6.5, Microsoft has already announced an overhauled user interface, including full touchscreen support with larger icons; powerful, Web-based management, backup, and syncing capabilities; and an improved (touch-friendly) update to Internet Explorer Mobile. These features are virtually guaranteed to be carried through to WM7. The leaked specification sheet and other reports on WM7 promise multi-touch (the ability to use two fingers at once on the screen) for zooming, scaling, and (we assume) panning motions similar to those used with the iPhone. Hints from Ballmer and others also promise a host of new core applications.

Ballmer previously announced that Microsoft hopes to blur the lines between the smartphone and the PC, so we're betting that Windows Mobile 7 will be as closely integrated with the upcoming Windows OS (dubbed Windows 7) as Microsoft can make it.

by Jennifer Farwell

by Nathan Lake

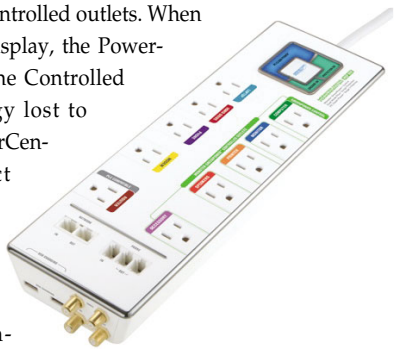
Greenovations

Energy-Conscious Tech

The electronic devices that make our lives easier also produce some unwanted side effects on the environment. Fortunately, many consumer electronics manufacturers are now making products that keep us productive and lessen our device's energy demands. In this article, we'll cover some of the newest environmentally friendly technology available.

Green Monster

Monster released a line of GreenPower PowerCenters (prices vary by model; www.monstercable.com) that are designed to automatically minimize the power to electronics in standby mode. Simply connect your main display device to the GreenPower Control outlet and your other electronics, such as home-theater hardware, to the GreenPower Controlled outlets. When you turn off the primary display, the PowerCenter will cut power to the Controlled outlets to eliminate energy lost to standby devices. The PowerCenter products also protect your electronics against power surges and spikes in AC power. The HDP 1400 and HDP 1850 models feature clean power technology that can help improve video and audio quality in your home-theater equipment.



Go For A Power Walk

Tremont Electric nPower PEG (Personal Energy Generator; pricing not yet available; www.greennpower.com) utilizes kinetic energy—natural energy created by motion—to power your portable gadgets. Just keep the nPower PEG on you while walking or performing other tasks where your body is physically moving (it doesn't work well in a car or on the bus), and the PEG will transfer kinetic energy directly to your portable device. According to Tremont Electric, the PEG can deliver up to 80% of the power needed to run the average electronic gadget, such as a mobile phone or digital media player. The PEG is compatible with around 90% of portable electronics, and it comes with two free adapters of your choosing when you order. Currently, the nPower PEG is only available for preorder from the Tremont Electric Web site.

Reduce Waste From Office Electronics

Imation's Earthwise toner cartridges (prices vary by cartridge; www.imation.com) are remanufactured, which means that Imation has disassembled, cleaned, and inspected the toner cartridge before filling it with new toner. Imation indicates that around 97% of the toner cartridge, including its plastic, metal, and rubber, is reused in its Earthwise toner cartridges. That said, if any of the components are worn or damaged, Imation replaces the used-up hardware; also, each toner cartridge features a new drum. The packaging for the Earthwise cartridges are made of 80% recycled material, and the shipping box doubles as a return shipper.

Quick Guide To Smartphones

by Jennifer Johnson

Time is precious. We are always looking to maximize every minute.

Given the many ways a smartphone can help you make the most of the time you have, it's no wonder this device has become a staple for many business professionals. Even so, shopping for a smartphone can be confusing. We're here to help with some things to keep in mind if you're looking to purchase a smartphone.

Design Factors

LIKE regular cell phones, smartphones come in many shapes and sizes. There are candy bar-style smartphones, sliders, and clamshells. No single form factor is right for everyone. Some smartphones have a hardware keyboard, while others use an on-screen keyboard. Touchscreens are another optional feature. Consider the size of the smartphone along with its design. You'll want a smartphone that fits comfortably in your hand and is easy to use. For some people, this may be a sliding smartphone with a full QWERTY keyboard and touchscreen. Other users may prefer something a bit smaller, such as a thin candy bar-style phone with very few hardware buttons.

Wireless & GPS

SMARTPHONES keep us connected while we're away from the office. Smartphones with integrated Wi-Fi provide an additional means of connectivity beyond traditional cellular airwaves. With Wi-Fi, you can connect to the Internet at high speeds when a hotspot is available.

Another option for connectivity is Bluetooth, a standard for short-range wireless communications. Bluetooth technology is often used to connect two devices, such as a smartphone and a wireless headset. You can also use Bluetooth to connect your smartphone to your laptop, thereby allowing the phone to serve as a high-speed modem for the notebook using dial-up networking.

If your smartphone has built-in GPS and navigation software, your phone can serve double-duty as your personal co-pilot, ensuring you take an efficient route to your destination.

On The Inside

WHEN shopping for a smartphone, you'll come across a variety of acronyms that describe the types of networks on which a phone operates. CDMA (Code-Division Multiple Access) and GSM (Global System for Mobile Communications) are the most common cellular standards. AT&T and T-Mobile operate on GSM, while Verizon Wireless and Sprint use CDMA.

GSM is most common worldwide, though CDMA providers in the U.S. do sell phones that work overseas. If you're planning to travel overseas and want to use your smartphone during your travels, be sure to buy a phone that supports the frequency bands used overseas. You'll also need an appropriate calling plan from your carrier.

What's An Unlocked Phone?

IN THE U.S., we buy phones at a discounted price because the cellular provider (AT&T, Sprint, T-Mobile, Verizon Wireless, and so on) subsidizes the price of the phone. In return for the discount, carriers require you to sign a contract agreeing to have service with the carrier for a specified length of time (typically one or two years). To protect their own interests, many carriers lock the phones so customers can only use the phone on that carrier's network. If you prefer to not sign a contract and wish to pay full retail price for the phone, you can get an unlocked model to use with any compatible carrier.

OPERATING SYSTEMS

Android. Beneath the sci-fi name lies a full-fledged mobile OS built by Google, among others, and based on Linux.

BlackBerry. BlackBerry handhelds are known for their solid email capabilities, and full-featured consumer models are now available.

OS X iPhone. Apple developed its own OS for use on the iPhone, complete with a full Safari Web browser.

Palm. If you had a Palm PDA in the past and want something similar in a smartphone, you'll appreciate Palm OS.

Symbian. Symbian platforms (including S60) run on most smartphones worldwide but are less common in the U.S.

webOS. Palm's webOS, introduced for the Pre smartphone, is Linux-based, supports touchscreen apps, and interacts with Web services.

Windows Mobile. For users who are accustomed to using Windows on their computers, the Windows Mobile OS is familiar and easy to learn.

AT&T

Model	Apple iPhone 3G	Apple iPhone 3GS	BlackBerry Bold	BlackBerry Curve 8320	BlackBerry Curve 8900	HTC Fuze	LG Incite
	Image courtesy of Apple	Image courtesy of Apple					
Manufacturer	Apple	Apple	Research In Motion	Research In Motion	Research In Motion	HTC	LG Electronics
Operating System	Apple iPhone OS (OS X)	Apple iPhone OS (OS X)	BlackBerry OS	BlackBerry OS	BlackBerry OS	Windows Mobile Professional 6.1	Windows Mobile Professional 6.1
Type	Bar	Bar	Bar	Bar	Bar	Slider	Bar
Text Input	Touchscreen	Touchscreen	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard	Touchscreen
Frequency Bands	GSM (850/900/1800/1900MHz); WCDMA (850/1900/2100MHz)	GSM (850/900/1800/1900MHz); WCDMA (850/1900/2100MHz)	GSM (850/900/1800/1900MHz); WCDMA (850/1900/2100MHz)	GSM (850/900/1800/1900MHz)	GSM (850/900/1800/1900MHz)	GSM (850/900/1800/1900MHz); WCDMA (850/1900/2100MHz)	GSM (850/900/1800/1900MHz); WCDMA (850/1900/2100MHz)
Data	EDGE	EDGE	EDGE	EDGE Class 10	EDGE	EDGE	EDGE
Talk Time (Maximum)	10 hours (2G); 5 hours (3G)	5 hours	4.5 hours	4 hours	5 hours	7.4 hours	8.7 hours
Standby Time (Maximum)	12 days	12.5 days	13.5 days	15 days	15 days	19.3 days	21.3 days
Memory (Available Internal)	8GB or 16GB	16GB or 32GB	1GB	64MB	256MB	295MB	128MB
Memory (Expandable)	N/A	N/A	microSD (32GB)	microSD (32GB)	microSD (16GB)	microSD (32GB)	microSD (32GB)
Navigation	A-GPS	A-GPS	GPS	N/A	GPS	GPS	GPS
Bluetooth	Bluetooth 2.0 +EDR	Bluetooth 2.1 +EDR	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 +EDR	Bluetooth 2.0 with A2DP (stereo)
Wi-Fi	802.11b/g	802.11b/g	802.11b/g	802.11b/g	802.11b/g	802.11b/g	802.11b/g
Camera	2MP	3MP	2MP	2MP	3.2MP	3.2MP	3MP
Display Size	3.5 inches	3.5 inches	2.6 inches	2.5 inches	2.4 inches	2.8 inches	3 inches
Weight	4.7 ounces	4.76 ounces	4.8 ounces	3.92 ounces	3.88 ounces	5.82 ounces	4.23 ounces
Dimensions (HxWxD)	4.5 x 2.4 x 0.48 inches	4.55 x 2.44 x 0.48 inches	4.49 x 2.57 x 0.59 inches	4.2 x 2.4 x 0.6 inches	4.29 x 2.36 x 0.53 inches	4.02 x 2.01 x 0.71 inches	4.21 x 2.2 x 0.55 inches
Price*	$99 (8GB); $149 (16GB)	$199 (16GB); $299 (32GB)	$299.99	$149.99	$149.99	$299.99	$79.99

Model	Moto Q Global	Nokia E71x	Pantech Matrix Pro	Samsung Epix	Samsung Jack	Samsung Propel Pro
Manufacturer	Motorola	Nokia	Pantech	Samsung	Samsung	Samsung
Operating System	Windows Mobile Standard 6.1	S60 (Symbian)	Windows Mobile Standard 6.1	Windows Mobile Standard 6.1	Windows Mobile Standard 6.1	Windows Mobile Standard 6.1
Type	Bar	Bar	Slider	Bar	Bar	Slider
Text Input	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard
Frequency Bands	GSM (850/900/1800/1900MHz); WCDMA (850/1900/2100MHz)	GSM (850/900/1800/1900MHz); WCDMA (850/1900MHz)	GSM (850/900/1800/1900MHz); WCDMA (850/1900/2100MHz)	GSM (850/900/1800/900MHz); WCDMA (850/1900/2100MHz)	GSM (850/900/1800/1900MHz); WCDMA (850/1900/2100MHz)	GSM (850/900/1800/1900MHz); WCDMA (850/1900/2100MHz)
Data	EDGE	EDGE	EDGE	EDGE	EDGE	EDGE
Talk Time (Maximum)	9 hours	4 hours	3 hours	7 hours	7 hours	6 hours
Standby Time (Maximum)	30 days	12 days	10.4 days	14 days	12 days	12 days
Memory (Available Internal)	96MB	120MB	256MB	150MB	256MB	96MB
Memory (Expandable)	microSD (32GB)	microSD (8GB)	microSD (32GB)	microSD (32GB)	microSD (16GB)	microSD (16GB)
Navigation	GPS	GPS	GPS	GPS	GPS	A-GPS
Bluetooth	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)
Wi-Fi	N/A	802.11g	N/A	802.11b/g	802.11b/g	802.11b/g
Camera	2MP	3.2MP	2MP	2MP	3.2MP	3MP
Display Size	2.5 inches	2.4 inches	2.4 inches	2.55 inches	2.4 inches	2.55 inches
Weight	4.73 ounces	4.4 ounces	4.3 ounces	4.4 ounces	3.6 ounces	4.83 ounces
Dimensions (HxWxD)	4.65 x 2.63 x 0.47 inches	4.4 x 2.2 x 0.4 inches	4.17 x 2 x 0.85 inches	4.6 x 2.4 x 0.5 inches	4.4 x 2.4 x 0.5 inches	3.9 x 2.4 x 0.6 inches
Price*	$149.99	$99.99	$99.99	$179.99	$99.99	$149.99

*Prices are after discounts with service contracts as of press time and can vary by region.

Sprint

Model	BlackBerry Curve 8330	BlackBerry Curve 8350i	BlackBerry Curve 8350i (no camera)	BlackBerry Pearl 8130	BlackBerry Tour 9630	Centro by Palm	HTC Snap
Manufacturer	Research In Motion	Research In Motion	Research In Motion	Research In Motion	Research In Motion	Palm	HTC
Operating System	BlackBerry OS	BlackBerry OS	BlackBerry OS	BlackBerry OS	BlackBerry OS	Palm OS 5.4.9	Windows Mobile Standard 6.1
Type	Bar	Bar	Bar	Bar	Bar	Bar	Bar
Text Input	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard
Frequency Bands	CDMA (850/ 1900MHz)	iDEN (800MHz)	iDEN (800MHz)	CDMA (850/ 1900MHz)	CDMA (850/1900 MHz); GSM (850/ 900/1800/1900MHz)	CDMA (850/ 1900MHz)	CDMA (850/ 1900MHz)
Data	EVDO	N/A	N/A	EVDO	EVDO Rev. A	EVDO	EVDO Rev. A
Talk Time (Maximum)	5.9 hours	4 hours	4 hours	4.6 hours	5 hours	3.5 hours	4 hours
Standby Time (Maximum)	11 days	7 days	7 days	9 days	14 days	12.5 days	13.3 days
Memory (Available Internal)	96MB	128MB	128MB	64MB	256MB	128MB	95MB
Memory (Expandable)	microSD (8GB); 1GB card included	microSD (16GB); 1GB card included	microSD (16GB); 1GB card included	microSD (8GB)	microSD (16GB); 2GB card included	microSD (4GB)	microSD (16GB)
Navigation	GPS	GPS	GPS	GPS	GPS	A-GPS	GPS
Bluetooth	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 +EDR with A2DP (stereo)	Bluetooth 1.2	Bluetooth 2.0 +EDR with A2DP (stereo)
Wi-Fi	N/A	802.11b/g	802.11b/g	N/A	N/A	N/A	N/A
Camera	2MP	2MP	N/A	2MP	3.2MP	1.3MP	2MP
Display Size	2.5 inches	2.4 inches	2.4 inches	2.25 inches	2.4 inches	2.2 inches	2.4 inches
Weight	4 ounces	4.7 ounces	4.7 ounces	3.4 ounces	4.58 ounces	4.2 ounces	4.2 ounces
Dimensions (HxWxD)	4.2 x 2.4 x 0.63 inches	4.4 x 2.4 x 0.7 inches	4.4 x 2.4 x 0.7 inches	4.2 x 1.9 x 0.6 inches	4.4 x 2.4 x 0.6 inches	4.2 x 2.1 x 0.7 inches	4.5 x 2.5 x 0.5 inches
Price*	$49.99	$99.99	$99.99	$49.99	$199.99	$49.99	$149.99

Model	HTC Touch PRO	Palm Pre	Samsung Ace	Touch Diamond by HTC	Treo PRO by Palm	Treo 755p by Palm	8830 by BlackBerry
Manufacturer	HTC	Palm	Samsung	HTC	Palm	Palm	Research In Motion
Operating System	Windows Mobile Professional 6.1	webOS	Windows Mobile Standard 6	Windows Mobile Professional 6.1	Windows Mobile Professional 6.1	Palm OS 5.4.9	BlackBerry OS
Type	Slider	Slider	Bar	Bar	Bar	Bar	Bar
Text Input	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard	Touchscreen	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard
Frequency Bands	CDMA (850/ 1900MHz)	CDMA (850/1900MHz)	CDMA (850/ 1900MHz)	CDMA (850/ 1900MHz)	CDMA (850/ 1900MHz)	CDMA (850/ 1900MHz)	CDMA (850/ 1900MHz)
Data	EVDO	EVDO Rev. A	EVDO	EVDO	EVDO Rev. A	EVDO	EVDO
Talk Time (Maximum)	4 hours	5 hours	4.3 hours	4.2 hours	5 hours	4.2 hours	3.6 hours
Standby Time (Maximum)	N/A	N/A	N/A	14.6 days	N/A	10 days	9 days
Memory (Available Internal)	328MB	7GB	96MB	4GB	300MB	60MB	64MB
Memory (Expandable)	microSD (16GB); 1GB card included	N/A	microSD (2GB)	N/A	microSD (32GB)	miniSD	microSD (2GB)
Navigation	GPS	GPS	A-GPS	GPS	GPS	A-GPS	GPS
Bluetooth	Bluetooth 2.0 +EDR with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 +EDR with A2DP (stereo)	Bluetooth 2.0 +EDR with A2DP (stereo)	Bluetooth 1.2	Bluetooth 2.0
Wi-Fi	802.11b/g	802.11b/g	N/A	802.11b/g	802.11b/g	N/A	N/A
Camera	3.2MP	3MP	1.3MP	3.2MP	2MP	1.3MP	N/A
Display Size	2.8 inches	3.1 inches	2.3 inches	2.8 inches	2.5 inches	2.5 inches	2.5 inches
Weight	5.3 ounces	4.76 ounces	3.9 ounces	4.1 ounces	4.7 ounces	5.64 ounces	4.6 ounces
Dimensions (HxWxD)	4 x 2 x 0.71 inches	3.9 x 2.3 x 0.67 inches	4.65 x 2.32 x 0.46 inches	4 x 2 x 0.6 inches	2.4 x 4.5 x 0.5 inches	4.4 x 2.12 x 0.84 inches	4.49 x 2.6 x 0.55 inches
Price*	$299.99	$199.99	$49.99	$199.99	$199.99	$99.99	$99.99

*Prices are after discounts with service contracts as of press time and can vary by region.

T-Mobile

Model	BlackBerry Curve 8900	BlackBerry Pearl 8120	BlackBerry Pearl Flip 8220	BlackBerry 8700g
Manufacturer	Research In Motion	Research In Motion	Research In Motion	Research In Motion
Operating System	BlackBerry OS	BlackBerry OS	BlackBerry OS	BlackBerry OS
Type	Bar	Bar	Flip	Bar
Text Input	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard
Frequency Bands	GSM (850/900/1800/1900MHz)	GSM (850/900/1800/1900MHz)	GSM (850/900/1800/1900MHz)	GSM (850/900/1800/1900MHz)
Data	EDGE	EDGE	EDGE	EDGE
Talk Time (Maximum)	5.5 hours	4 hours	4 hours	4 hours
Standby Time (Maximum)	15 days	15 days	15 days	16 days
Memory (Available Internal)	64MB	64MB	128MB	64MB
Memory (Expandable)	microSD; 256MB card included	microSD	microSD (16GB); 256MB card included	N/A
Navigation	GPS	N/A	N/A	N/A
Bluetooth	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0
Wi-Fi	802.11b/g	802.11b/g	N/A	N/A
Camera	3.2MP	2MP	2MP	N/A
Display Size	2.4 inches	2.25 inches	2.25 inches	2.5 inches
Weight	3.9 ounces	3.2 ounces	3.6 ounces	4.7 ounces
Dimensions (HxWxD)	4.3 x 2.4 x 0.5 inches	4.2 x 2 x 0.6 inches	3.9 x 2 x 0.7 inches	4.3 x 2.7 x 0.8 inches
Price*	$74.99	$79.99	$49.99	$99.99

Model	BlackBerry 8820	Dash	Dash 3G	Shadow	G1 with Google
Manufacturer	Research In Motion	HTC	HTC	HTC	HTC
Operating System	BlackBerry OS	Windows Mobile Standard 6	Windows Mobile Standard 6.1	Windows Mobile Standard 6.1	Android
Type	Bar	Bar	Bar	Slider	Slider
Text Input	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard
Frequency Bands	GSM (850/900/1800/1900MHz)	GSM (850/900/1800/1900MHz)	GSM (850/900/1800/1900MHz)	GSM (850/900/1800/1900MHz)	GSM (850/900/1800/1900MHz)
Data	EDGE	EDGE	HSDPA	EDGE	HSDPA
Talk Time (Maximum)	5 hours	5 hours	5 hours	7 hours	5 hours
Standby Time (Maximum)	22 days	9 days	9 days	7 days	5 days
Memory (Available Internal)	64MB	23MB	23MB	144MB	71MB
Memory (Expandable)	microSD	microSD	microSD	microSD	microSD (8GB); 1GB card included
Navigation	GPS	N/A	N/A	N/A	A-GPS
Bluetooth	Bluetooth 2.0 +EDR	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 +EDR
Wi-Fi	802.11a/b/g	802.11b/g	802.11b/g	802.11b/g	802.11b/g
Camera	N/A	1.3MP	2MP	2MP	3.2MP
Display Size	2.5 inches	2.4 inches	2.4 inches	2.6 inches	3.2 inches
Weight	4.7 ounces	4.2 ounces	4.2 ounces	5.3 ounces	5.6 ounces
Dimensions (HxWxD)	4.5 x 2.6 x 0.6 inches	4.4 x 2.5 x 0.5 inches	4.4 x 2.5 x 0.5 inches	4.1 x 2.1 x 0.6 inches	4.6 x 2.2 x 0.6 inches
Price*	$99.99	$49.99	$169.99	$149.99	$149.99

*Prices are after discounts with service contracts as of press time and can vary by region.

Verizon Wireless

Model	BlackBerry Curve 8330	BlackBerry Storm 9530	BlackBerry Tour 9630	BlackBerry 8703e	BlackBerry 8830 World Edition	HTC Ozone
Manufacturer	Research In Motion	Research In Motion	Research In Motion	Research In Motion	Research In Motion	HTC
Operating System	BlackBerry OS	BlackBerry OS	BlackBerry OS	BlackBerry OS	BlackBerry OS	Windows Mobile 6.1 Standard
Type	Bar	Bar	Bar	Bar	Bar	Bar
Text Input	QWERTY keyboard	Touchscreen	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard	QWERTY keyboard
Frequency Bands	CDMA (850/1900MHz)	CDMA (850/1900 MHz); GSM (850/900/1800/1900MHz); WCDMA (2100MHz)	CDMA (850/1900MHz); GSM (850/900/1800/1900 MHz)	CDMA (850/1900MHz)	GSM (900/1800MHz)	CDMA (850/1900MHz); GSM (850/900/1800/1900 MHz)
Data	EVDO	EVDO, HSPA	EVDO Rev. A	EVDO	GPRS, EVDO	EVDO Rev. A
Talk Time (Maximum)	5.9 hours	4.5 hours	5 hours	3.3 hours	3.6 hours (CDMA/GSM); 5 hours (GPRS)	4.8 hours
Standby Time (Maximum)	11 days	15.5 days	14 days	8 days	9 days (CDMA/GSM); 16 days (GPRS)	13.5 days
Memory (Available Internal)	96MB	128MB	256MB	64MB	64MB	512MB
Memory (Expandable)	microSD (8GB); 1GB card included	microSD (16GB); 8GB card included	microSD (16GB); 2GB card included	N/A	microSD (4GB)	microSD (16GB)
Navigation	GPS	VZ Navigator	GPS	N/A	VZ Navigator	VZ Navigator
Bluetooth	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 +EDR with A2DP (stereo)	Bluetooth 2.0	Bluetooth 2.0	Bluetooth 2.0 +EDR with A2DP (stereo)
Wi-Fi	N/A	N/A	N/A	N/A	N/A	802.11b/g
Camera	2MP	3.2MP	3.2MP	N/A	N/A	2MP
Display Size	2.5 inches	3.25 inches	2.4 inches	2.5 inches	2.5 inches	2.4 inches
Weight	4 ounces	5.47 ounces	4.58 ounces	4.7 ounces	4.6 ounces	3.7 ounces
Dimensions (HxWxD)	4.2 x 2.4 x 0.63 inches	4.43 x 2.45 x 0.55 inches	4.4 x 2.4 x 0.6 inches	4.3 x 2.7 x 0.77 inches	4.49 x 2.6 x 0.55 inches	4.5 x 2.5 x 0.5 inches
Price*	$49.99	$149.99	$199.99	$29.99	$49.99	$49.99

Model	HTC Touch Diamond	HTC Touch Pro	Samsung Omnia	Samsung Saga	SMT5800	XV6900
Manufacturer	HTC	HTC	Samsung	Samsung	HTC	HTC
Operating System	Windows Mobile Professional 6.1	Windows Mobile Professional 6.1	Windows Mobile Professional 6.1	Windows Mobile Professional 6.1	Windows Mobile Standard 6	Windows Mobile Professional 6
Type	Bar	Bar	Bar	Bar	Slider	Bar
Text Input	Touchscreen	Touchscreen	Touchscreen	QWERTY keyboard	QWERTY keyboard	Touchscreen
Frequency Bands	CDMA (850/1900MHz)	CDMA (850/1900MHz)	CDMA (850/1900MHz)	CDMA (850/1900MHz); GSM (850/900/1800/1900MHz)	CDMA (850/1900MHz)	CDMA (850/1900MHz)
Data	EVDO Rev. A	EVDO Rev. A	EVDO	EVDO Rev. A	EVDO	EVDO
Talk Time (Maximum)	5 hours	4.2 hours	5.7 hours	5 hours	3.5 hours	3.5 hours
Standby Time (Maximum)	15.6 days	14.6 days	19.3 days	13.5 days	6.8 days	10.4 days
Memory (Available Internal)	256MB	512MB	264MB	256MB	128MB	128MB
Memory (Expandable)	microSD (16GB)	microSD (16GB)	microSD (16GB)	microSD (16GB)	microSD (8GB)	microSD (8GB)
Navigation	N/A	VZ Navigator	VZ Navigator	N/A	N/A	N/A
Bluetooth	Bluetooth 2.0 +EDR with A2DP (stereo)	Bluetooth 2.0 +EDR with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)	Bluetooth 2.0 with A2DP (stereo)
Wi-Fi	802.11b/g	802.11b/g	802.11b/g	802.11b/g	N/A	N/A
Camera	3.2MP	3.2MP	5MP	2MP	2MP	2MP
Display Size	2.8 inches	2.8 inches	3.2 inches	2.55 inches	2.4 inches	2.8 inches
Weight	4.2 ounces	4.94 ounces	4.34 ounces	4.59 ounces	4.2 ounces	3.95 ounces
Dimensions (HxWxD)	4 x 2 x 0.55 inches	4.17 x 2.04 x 0.71 inches	4.4 x 2.24 x 0.52 inches	4.88 x 2.44 x 0.53 inches	4.1 x 2 x 0.7 inches	3.98 x 2.35 x 0.56 inches
Price*	$299.99	$349.99	$199.99	$199.99	$99.99	$49.99

*Prices are after discounts with service contracts as of press time and can vary by region.

TAKEAWAY
The new Palm® Pre™ offers true multitasking—phone and data, no waiting.

Palm® Pre™

Logic is a good thing. If you've been waiting for a smartphone that can handle tasks the way you've always thought a smartphone should, you have something to look forward to: the new Palm® Pre™ from Sprint®, featuring Palm's new webOS™ mobile operating system. With webOS, you can multitask with ease and even move quickly forward and backward between Web sites. The phone's Synergy™ feature brings logic to planning, as well, as it combines your Microsoft Outlook®, Google™, and Facebook® calendars into one convenient view. A curved, slide-out QWERTY keyboard lets you input comfortably.

The Pre offers combined messaging, which means that text, instant, and multimedia messages are organized based on the contact you're communicating with, not the type of messaging; you can start an IM thread, for instance, and continue it with SMS. Other features include GPS, Bluetooth® 2.1 +EDR, and a 3MP digital camera with flash and extended depth of field.

Key Facts

- Palm's brand-new webOS™ lets you search applications, your calendar, contacts, and the Internet all at the same time
- With webOS, there's no need to stop a task before starting a new one
- Voice and 3G cellular network access lets you use all of the smarpthone's features without delays

Tech Specs

- 3G EVDO Rev. A
- 3.1-inch touchscreen
- 8GB user storage; USB mass storage available
- Wi-Fi (802.11b/g)
- Bluetooth® 2.1 +EDR
- GPS built in
- 4.76 ounces
- 3.9 x 2.3 x 0.67 inches (HxWxD)
- 3MP camera with LED flash

palm

Sprint

$199.99 after discounts with two-year contract | Sprint | now.sprint.com/palmpre

TAKEAWAY
Reliability, productivity, and entertainment; get it all in one smartphone.

Samsung Jack

With the new Samsung Jack from AT&T, you can get business done fast and get where you're going with ease. A Windows Mobile® smartphone, the Jack comes with productivity tools that include email (Xpress Mail, Outlook, and others), a calendar, personal organizer, and address book, plus conferencing and call forwarding capabilities. And you can keep your hands (and your headphones) free with the phone's stereo Bluetooth® features. As for traveling, the Jack is GPS-equipped and fully prepared to speak turn-by-turn directions as you drive.

With the Samsung Jack in hand, you can also leave behind your portable digital music player. The Jack has a built-in media player for playing tunes you purchase through the AT&T Mobile Music service and digital tunes stored on a microSD™ card (up to 16GB). The smartphone also offers streaming audio from XM Radio Mobile, where you can access music, news, comedy, and more.

Key Facts

- Get turn-by-turn driving direction with the Jack's voice-guided GPS
- Enjoy 3G data speeds as fast as 3.6Mbps
- Unlike some other business-oriented smartphones, the Jack gives you Wi-Fi access

Tech Specs

- GSM (850/900/1800/1900MHz); WCDMA (850/1900/2100MHz); EDGE
- 2.4-inch touchscreen
- 256MB internal memory; microSD™ card slot (up to 16GB)
- Wi-Fi (802.11b/g)
- Bluetooth® 2.0 +with A2DP (stereo)
- GPS
- 3.6 ounces
- 4.4 x 2.4 x 0.5 inches (HxWxD)
- 3.2MP camera

at&t

$99.99 after discounts with two-year contract | AT&T | www.wireless.att.com

TAKEAWAY
With larger capacities, more power, and new features, what's not to love?

Image courtesy of Apple.

iPhone 3G S

With support for 7.2Mbps HSDPA connectivity and other technical improvements, the Apple® iPhone™ 3G S performs up to twice as fast as the iPhone 3G. Smarter than the typical smartphone in many ways, such as its ability to orient maps in the direction you're facing, the iPhone 3G S includes Apple's new iPhone OS 3.0. The new OS includes a slew of improvements, such as the ability to cut, copy, and paste text; landscape orientation for the soft keyboard; Internet tethering; a faster version of the Safari Web browser, which can now autofill usernames and passwords; and Voice Memos for recording notes anytime.

Among other new iPhone 3G S-specific innovations, you'll find a feature called Voice Control, which recognizes voice commands in 21 languages and lets you place calls, select music to play, or find out what song is currently playing by simply asking the iPhone. Another key feature, Spotlight Search, lets you find anything you need on the iPhone through a single interface. Ready for more? Try the iPhone 3G S.

Key Facts

- Apple's newest iPhone features a 3MP autofocus digital camera
- The Voice Control feature lets you simply ask your iPhone which contact you want to call or which song you want to play
- A chat-style view makes it easy to exchange text and multimedia messages
- A digital compass works with the new Compass app to orient maps in the direction you're facing
- The Multi-Touch on-screen keyboard helps by suggesting words as you type

Tech Specs

- GSM/EDGE (850/900/1800.1900MHz); UMTS/HSDPA (850/1900/2100MHz)
- 12 hours maximum talk time on 2G, 5 hours on 3G
- 300 hours maximum standby time
- Assisted GPS
- Wi-Fi (802.11b/g)
- Bluetooth® 2.1 +EDR
- 3MP camera
- 3.5mm stereo headphone minijack
- 3.5-inch display
- 4.8 ounces

$199 (16GB) or $299 (32GB) with two-year AT&T contract | Apple | www.apple.com

TAKEAWAY
Communications and multimedia meet in this 3G World Phone.

BlackBerry 9630 Tour

Research In Motion® recently announced the BlackBerry® 9630 Tour, a World Phone designed to deliver all of the features you need both on-board and via 3G networks across the globe. The Tour includes EVDO Rev. A support for fast, 3G connectivity in North America; it's also a quad-band EDGE/GPRS/GSM and 3G UMTS/HSPA phone that's ready for international travel. The Tour has built-in GPS and preloaded BlackBerry Maps with support for additional location-based applications. You can visit the BlackBerry App World™ for travel apps and virtually any other type of BlackBerry-specific software, as well.

The BlackBerry Tour handles productivity and multimedia apps with equal aplomb. For example, the Tour comes with DataViz® Documents To Go® mobile office software and a built-in media player that handles audio and video. In addition to the Tour's 256MB internal memory, you can add a microSD™ card (up to 32GB) to hold your documents and media files. The Tour is available through Sprint and Verizon Wireless.

Key Facts

- Browser handles full HTML and supports audio and video streaming
- DataViz® Documents To Go® is installed right out of the box, giving you immediate support for Microsoft® Word, Excel, and PowerPoint editing
- 3.2MP autofocus digital camera includes flash, image stabilization, variable zoom, and video-recording features
- Media player and 3.5mm headphone jack let you keep your music on your BlackBerry; MediaSync supports both Apple® iTunes® and Microsoft® Windows Media® Player

Tech Specs

- GSM/GPRS/EDGE (850/900/1800/1900MHz); UMTS/HSPA (2100MHz); CDMA/EVDO Rev. A (800/1900MHz)
- Up to five hours talk time
- Up to 14 days standby time
- 256MB storage; expandable memory
- Assisted, Autonomous, and Simultaneous GPS
- Bluetooth® 2.0 with A2DP (stereo)
- 3.2MP camera
- 3.5mm stereo headphone jack
- 4.58 ounces

BlackBerry

Pricing set by carrier | Research In Motion | www.rim.com

Quick Guide To Notebooks & Portables

by Tessa Warner Breneman

Component Choices

WHEN purchasing a notebook or portable device, there are many features and components to consider, and you'll likely encounter a few unfamiliar terms during your search for just the right device, as well. The key is to understand your basic options.

First, you should decide whether you need a single-, dual-, or quad-core processor. (A dual-core processor will be more efficient than a single-core processor and lets you perform twice the work in the same amount of time; quad-core processors are typically for desktop-replacement notebooks.) You also need to consider system memory and whether 1GB will be adequate or if you should purchase 2GB or more and extend the life of your machine. Built-in Ethernet is becoming standard on many portable devices, but be sure yours supports the latest wireless technology standard, 802.11n. When shopping for any device, weight and design are very important considerations: You probably don't want to lug a heavy desktop replacement notebook through airport security.

The Extras

PORTABLE devices have evolved to offer some very useful added features, such as built-in wireless technology, Bluetooth capabilities, and support for Blu-ray Discs. Some notebooks also offer as many as six USB ports. Fingerprint readers provide extra security for data, and a freefall sensor adds physical protection to your hardware during accidental drops.

When looking at extra features, consider how you'll use your device. For example, an integrated Web cam could be useful for remote meetings. Several UMPCs (Ultra-Mobile PCs) have touchscreens that recognize handwriting and include GPS navigational software. Also, some MIDs (mobile Internet devices) offer high-definition video and audio compatibility.

Optimal Configuration For Vista

HOW do you know if you're getting the most from Vista? The minimum requirements for running Vista are 512MB of RAM and an 800MHz processor. Some laptop manufacturers, such as Dell and IBM, say you're better having at least 2GB of RAM. You'll need at least 1GB of RAM, a 128MB graphics card, and a 1GHz processor to experience the Aero user interface on Vista.

Vista has features, such as SuperFetch, that require more gigabytes of memory than Windows XP apps. SuperFetch takes data from the hard drive and stores it on available RAM so it's accessible from the processor, which would ultimately require more than the suggested amount of RAM. If you're purchasing a computer rather than merely upgrading your OS, be sure you get your money's worth by purchasing a notebook with at least 2GB of RAM, a 1GHz processor, and a 128MB graphics card.

TYPES OF PORTABLES

MID (mobile Internet device)—The MID is between a handheld computer and a UMPC in terms of size and can provide the same entertainment and information features as UMPCs.

Netbook—Part of the subnotebook category, these tiny, lightweight devices emphasize Web connectivity and don't typically have internal optical drives. Many run a Linux OS.

Notebook—A notebook (aka laptop) is a battery- or AC-powered portable computer, usually weighing 4 pounds or more.

Subnotebook—This is a small notebook that weighs 4 pounds or less.

UMPC (Ultra-Mobile PC)—Using a Windows-based platform created by Microsoft, a UMPC is a miniature notebook (smaller than most netbooks) that usually weighs 2 pounds or less.

YOU GET WHAT YOU PAY FOR

$500 will get you:

- A standard-sized notebook
- A 2GHz or less dual-core processor
- 2 to 3GB of RAM
- 160GB of hard drive space
- Vista Home Basic

$1,000 will get you:

- An ultraportable or standard-sized notebook
- A 2GHz dual-core processor
- 3 to 4GB of RAM
- 250 to 320GB of hard drive space
- Vista Home Premium

$2,000 will get you:

- An entertainment, standard-sized, or ultraportable notebook
- 2.1 to 2.2GHz enhanced dual-core processor
- 4GB of RAM
- 400GB of hard drive space
- Vista Home Premium or Ultimate

8- to 11-inch Notebooks

Model	Dell Inspiron Mini 10	HP Mini 110 XP Edition	MSI Computer Wind U120-024US	Sony VAIO P Series Lifestyle PC VGN-P530H/Q
Other Models In Line	Inspiron Mini 9, 10v, 12	Mini 110 Mi Edition, Mini 1000 Vivienne Tam Edition	Wind Series U100-279US, 280US, 432US, 439US, 451US, 641US; U115-021US; U120-024US; U123-001US	VAIO P Series Lifestyle PC VGN-P688E/(G/N/Q/R/W), -P699E/(Q/R)
Screen Size	10.1 inches	10.1 inches	10 inches	8 inches
Dimensions (HxWxD)	1.06 to 1.11 x 10.26 x 7.19 inches	0.99 x 10.3 x 6.56 inches	0.748 to 1.24 x 10.23 x 7.08 inches	0.78 x 9.65 x 4.72 inches
Weight (With Standard Battery)	2.5 pounds	2.25 pounds	2 pounds	1.4 pounds
Operating System (Default; Optional)	Windows XP Home Edition SP3; Ubuntu Linux 8.04	Windows XP Home Edition	Windows XP Home Edition	Windows Vista Home Premium; Vista Home Basic
Processor (Base Configuration; Maximum Optional)	1.33GHz Intel Atom Z520; 1.6GHz Intel Atom Z530	1.6GHz Intel Atom N270; 1.66GHz Intel Atom N280	1.6GHz Intel Atom N270	1.33GHz Intel Atom Z520
Memory (Base Configuration; Maximum Optional)	1GB DDR2 SDRAM	1GB DDR2 SDRAM	1GB DDR2 SDRAM	2GB DDR2 SDRAM
Storage (Base Configuration; Maximum Optional)	160GB SATA 5,400rpm; 250GB SATA 5,400rpm or 64GB SSD	16GB SSD; 160GB SATA 5,400rpm or 32GB SSD	160GB SATA 5,400rpm	60GB SATA 5,400rpm; 128GB SSD
Optical Drive (Base Configuration; Maximum Optional)	N/A	N/A	N/A	N/A
Graphics	Integrated Intel Graphics Media Accelerator 500	Intel Graphics Media Accelerator 950	Intel Graphics Media Accelerator 950	Integrated Intel Graphics Media Accelerator
Wireless Technologies	Dell 1510 WLAN 802.11g/ Draft N Mini Card; Bluetooth 2.1 +EDR	Integrated WLAN (802.11b/g); optional HP Mobile Broadband through AT&T, Sprint, or Verizon Wireless	Integrated WLAN (802.11b/g)	Atheros 802.11b/g/Draft N; Bluetooth 2.0 with A2DP (stereo); Verizon Wireless Mobile Broadband
Ports (Partial List)	USB 2.0 (x2); Power USB	Ethernet; USB 2.0 (x3); VGA	USB 2.0 (x3); VGA	Ethernet; USB 2.0 (x2); Memory Stick PRO and SD card slots; VGA
Battery Life (Max. Per Charge)	8 hours	3 hours	Varies	4 hours
Price (Base Configuration)	$349	$329.99	$379.99	$899.99

12-inch Notebooks

Model	Dell Latitude XT2	Lenovo Elite ThinkPad X200 Tablet	MSI Computer PR201-019US	Toshiba Portégé R500-S5004
Other Models In Line	Latitude E4200, E4300, E5400, E5500, E6400, E6400 ATG, E6400 XFR, E6500	ThinkPad X Series X200 Tablet	PR201-Blue, PR201-Pink	None
Screen Size	12.1 inches	12.1 inches	12.1 inches	12.1 inches
Dimensions (HxWxD)	1 x 11.7 x 8.6 inches	1.04 to 1.3 x 11.6 x 8.97 to 10.11 inches	0.94 to 1.18 x 11.93 x 9.09 inches	0.77 to 1 x 11.1 x 8.5 inches
Weight (With Standard Battery)	3.62 pounds	3.5 pounds	3.97 pounds	2.4 pounds
Operating System (Default; Optional)	Windows Vista Business SP1; Vista Ultimate	Windows Vista Business; Vista Ultimate	Windows Vista Home Premium	Windows Vista Business
Processor (Base Configuration; Maximum Optional)	1.2GHz Intel Core 2 Duo SU9300; 1.4GHz Intel Core 2 Duo SU9400	1.2GHz Intel Core 2 Duo SU9300; 1.86GHz Intel Core 2 Duo SL9400	2GHz Intel Penryn P7350	1.2GHz Intel Core 2 Duo U7700
Memory (Base Configuration; Maximum Optional)	1GB DDR3 SDRAM; 5GB	2GB DDR3 SDRAM; 4GB	2GB DDR2 SDRAM; 4GB	2GB DDR2 SDRAM
Storage (Base Configuration; Maximum Optional)	80GB SATA 5,400rpm; 160GB SATA 5,400rpm or 128GB SSD	160GB SATA 5,400rpm; 320GB SATA 7,200rpm or 128GB SSD	250GB SATA 5,400rpm	64GB solid-state drive
Optical Drive (Base Configuration; Maximum Optional)	8X CD-RW/DVD; 8X DVD±RW	CD-RW/DVD-ROM; DVD Burner Blu-ray Disc	DVD SuperMulti	DVD SuperMulti
Graphics	Integrated Intel Graphics Media Accelerator 4500MHD	Intel Graphics Media Accelerator 4500MHD	Intel Graphics Media Accelerator 4500MHD	Integrated Intel Graphics Media Accelerator 950
Wireless Technologies	Dell Wireless 1397 802.11b/g Mini Card	Intel WiFi Link 5100AGN (802.11a/b/g/Draft N); WiMAX; AT&T Mobile Broadband	Integrated WLAN (802.11b/g/Draft N)	Intel WiFi Link 4965AGN (802.11a/b/g/Draft N); Bluetooth 2.0 +EDR
Ports (Partial List)	Ethernet; USB 2.0 (x2); FireWire; VGA	Ethernet; USB 2.0 (x3); VGA	Ethernet; USB 2.0 (x2); VGA	Ethernet; USB 2.0 (x3); FireWire; VGA
Battery Life (Max. Per Charge)	11 hours (with optional 6-cell battery)	4.4 hours	Varies	7.5 hours
Price (Base Configuration)	$2,039	$2,074	$949.99	$2,099

13-inch Notebooks

Image courtesy of Apple

Model	Apple MacBook Air	Lenovo Elite ThinkPad X301	MSI Computer X-Slim X340-021US	Sony VAIO Z Series VGN-Z690
Other Models In Line	MacBook; 15-Inch MacBook Pro; 17-Inch MacBook Pro	Elite ThinkPad X200, X200s; ThinkPad X200, X200s, X301	X-Slim Series X340-023US	VAIO Z Series VGN-Z720D/B, Z790DKX, Z790DLX, Z790DMR, Z790DND, Z798Y/X
Screen Size	13.3 inches	13.3 inches	13.4 inches	13.1 inches
Dimensions (HxWxD)	0.16 to 0.76 x 12.8 x 8.94 inches	0.73 to 0.92 x 12.5 x 9.1 inches	0.24 to 0.78 x 13 x 8.82 inches	1 to 1.3 x 12.4 x 8.3 inches
Weight (With Standard Battery)	3 pounds	2.93 pounds	2.86 pounds	3.42 pounds
Operating System (Default; Optional)	Mac OS X v10.5 Leopard	Windows Vista Business; Vista Ultimate	Windows Vista Home Premium	Windows Vista Home Premium 64-bit; Vista Ultimate 64-bit
Processor (Base Configuration; Maximum Optional)	1.6GHz Intel Core 2 Duo; 1.86GHz Intel Core 2 Duo	1.4GHz Intel Core 2 Duo SU9400	1.4GHz Intel Penryn Core 2 Solo SU3500	2.4GHz Intel Core 2 Duo P8600; 2.66GHz Intel Core 2 Duo P9600
Memory (Base Configuration; Maximum Optional)	2GB DDR3 SDRAM	2GB DDR3 SDRAM; 4GB	2GB DDR2 SDRAM	2GB DDR3 SDRAM; 4GB
Storage (Base Configuration; Maximum Optional)	120GB SATA 4,200rpm; 128GB SSD	64GB SSD; 128GB SSD	320GB SATA 5,400rpm	160GB SATA 5,400rpm; 320GB SATA 7,200rpm, 400GB SATA 5,400rpm, or 256GB SSD
Optical Drive (Base Configuration; Maximum Optional)	N/A	Ultrathin DVD Burner	N/A	CD/DVD Burning Drive; Blu-ray Disc Drive
Graphics	Nvidia GeForce 9400M with 256MB DDR SDRAM shared with main memory	Mobile Intel Graphics Media Accelerator 4500MHD	Mobile Intel Graphics Media Accelerator 4500MHD	Nvidia GeForce 9300M GS GPU with 2,010MB memory; Mobile Intel Graphics Media Accelerator 4500MHD
Wireless Technologies	AirPort Extreme Wi-Fi (802.11 Draft N); Bluetooth 2.1 +EDR	Intel WiFi Link 5300AGN (802.11a/b/g/Draft N); Bluetooth 2.0 +EDR; WiMAX; AT&T Mobile Broadband	Integrated WLAN (802.11b/g/Draft N); Bluetooth 2.0 +EDR	Intel WiFi Link 5100AGN (802.11a/b/g/Draft N); Bluetooth 2.0 with A2DP (stereo); Verizon Wireless Mobile Broadband
Ports (Partial List)	USB 2.0; Mini DisplayPort	Ethernet; USB 2.0 (x3); VGA; DisplayPort	Ethernet; USB 2.0 (x2); VGA; HDMI	Ethernet; USB 2.0 (x2); Memory Stick Duo and SD memory card slots; VGA; HDMI
Battery Life (Max. Per Charge)	4.5 hours	3.45 hours	3.4 hours	6 hours
Price (Base Configuration)	$1,799	$2,980	$899	$1,599.99

14-inch Notebooks

Model	Dell Latitude E6400	HP Pavilion dv4t	Toshiba Satellite Pro S300M-EZ2402	Toshiba Tecra M10-S3411
Other Models In Line	Latitude E4200, E4300, E5400, E5500, E6400 ATG, E6400 XFR, E6500, XT2	Pavilion dv2z, dv3t, dv4t Special Edition	Satellite Pro U400, S300, L350	Tecra A10, R10
Screen Size	14.1 inches	14.1 inches	14.1 inches	14.1 inches
Dimensions (HxWxD)	1 to 1.5 x 13.1 x 9.37 inches	1.34 to 1.57 x 13.15 x 9.45 inches	1.5 x 13.3 x 9.6 inches	1.43 to 1.51 x 13.3 x 9.6 inches
Weight (With Standard Battery)	4.3 pounds	5.08 pounds	5.38 pounds	5.38 pounds
Operating System (Default; Optional)	Windows Vista Home Basic SP1; Vista Ultimate	Windows Home Premium; Vista Business or Vista Ultimate	Windows Vista Business	Windows Vista Business; Vista Ultimate
Processor (Base Configuration; Maximum Optional)	2.26GHz Intel Core 2 Duo P8400; 2.93GHz Intel Core 2 Duo T9800	2GHz Intel Pentium Dual-Core Mobile T4200; options range up to 2.66GHz Intel Core 2 Duo T9550	2.26GHz Intel Core 2 Duo P8400	2.4GHz Intel Core 2 Duo P8600; 2.66GHz Intel Core 2 Duo P9600
Memory (Base Configuration; Maximum Optional)	1GB DDR2-800 SDRAM; 8GB	2GB DDR2 SDRAM; 8GB	2GB DDR2 SDRAM	1GB DDR2 SDRAM; 4GB
Storage (Base Configuration; Maximum Optional)	80GB SATA 5,400rpm; 250GB SATA 7,200rpm, 160GB encrypted SATA 7,200rpm, or 128GB SSD	160GB SATA 5,400rpm; 250GB, 320GB, or 500GB SATA 5,400rpm	160GB SATA 5,400rpm	160GB SATA 5,400rpm; 200GB SATA 7,200rpm, 320GB SATA 5,400rpm, or 128GB SSD
Optical Drive (Base Configuration; Maximum Optional)	24X CD-RW/DVD; 8X DVD±RW	DVD SuperMulti	DVD SuperMulti	DVD SuperMulti
Graphics	Mobile Intel Graphics Media Accelerator 4500MHD With PC Card; Nvidia Quadro NVS 160M with ExpressCard	Intel Graphics Media Accelerator 4500MHD; Nvidia GeForce G 105M optional alternative	Integrated Intel Graphics Media Accelerator 4500MHD	Nvidia Quadro NVS 150M with 256MB memory
Wireless Technologies	Dell Wireless 1397 802.11b/g Mini Card	Integrated WLAN (802.11b/g); optional HP Mobile Broadband through AT&T, Sprint, or Verizon Wireless	Intel WiFi Link 5100AGN (802.11a/b/g/Draft N); Bluetooth 2.1 +EDR	Intel WiFi Link 5100AGN (802.11a/b/g/Draft N)
Ports (Partial List)	Ethernet; USB 2.0 (x4); FireWire; VGA; Display Port	Ethernet; USB 2.0 (x3); VGA; HDMI	Ethernet; USB 2.0 (x3); FireWire	Ethernet; USB 2.0 (x3); FireWire; VGA
Battery Life (Max. Per Charge)	19 hours (with optional 9-cell battery, battery slice, and SSD)	4 hours	2.96 hours	2.96 hours
Price (Base Configuration)	$999	$599.99	$949	$1,199

15-inch Notebooks

Image courtesy of Apple

Model	Apple 15-Inch MacBook Pro	Lenovo Elite ThinkPad R500	Lenovo Elite ThinkPad T500	MSI Computer GT627-218US
Other Models In Line	MacBook; 17-Inch MacBook Pro; MacBook Air	Elite ThinkPad R400; ThinkPad R400, R500	Enhanced ThinkPad T400, T500; ThinkPad T400, T500	GT627-216US
Screen Size	15.4 inches	15.4 inches	15.4 inches	15.4 inches
Dimensions (HxWxD)	0.95 x 14.35 x 9.82 inches	1.2 x 13.21 x 9.33 inches	1.1 to 1.3 x 13.2 x 9.4 inches	1.06 to 1.22 x 14.09 x 10.24 inches
Weight (With Standard Battery)	5.5 pounds	5.05 pounds	4.7 pounds	5.9 pounds
Operating System (Default; Optional)	Mac OS X v10.5 Leopard	Windows Vista Business; Vista Ultimate	Windows Vista Business; Vista Ultimate	Windows Home Premium
Processor (Base Configuration; Maximum Optional)	2.4GHz Intel Core 2 Duo; 2.93GHz Intel Core 2 Duo	2.4GHz Intel Core 2 Duo P8600; 2.8GHz Intel Core 2 Duo T9600	2.53GHz Intel Core 2 Duo T9400; 2.8GHz Intel Core 2 Duo T9600	2.4GHz Intel Penryn P8600
Memory (Base Configuration; Maximum Optional)	2GB DDR3 SDRAM; 4GB	2GB DDR3 SDRAM; 4GB	2GB DDR3 SDRAM; 8GB	2GB DDR2 SDRAM; 4GB
Storage (Base Configuration; Maximum Optional)	250GB SATA 5,400rpm; 320GB SATA 7,200rpm or 256GB SSD	160GB SATA 5,400rpm; 320GB SATA 5,400rpm or 250GB 7,200rpm encrypted	160GB SATA 7,200rpm; 250GB SATA 7,200rpm or 128GB SSD	320GB SATA 7,200rpm
Optical Drive (Base Configuration; Maximum Optional)	8X SuperDrive	DVD Recordable 8X Max Dual Layer; ThinkPad Blu-ray Recordable	DVD Recordable 8X Max Dual Layer; ThinkPad Blu-ray Recordable	Blu-ray Combo
Graphics	Nvidia GeForce 9600M GT with 256MB GDDR3 (with 2.4GHz configuration)	Integrated Intel Graphics Media Accelerator 4500MHD	ATI Mobility Radeon 3650 with 256GB memory	Nvidia GeForce 9800M GS with 1GB memory
Wireless Technologies	AirPort Extreme Wi-Fi (802.11 Draft N); Bluetooth 2.1 +EDR	Intel WiFi Link 5100AGN (802.11a/b/g)	WWAN with GPS; WiMAX; Bluetooth 2.1	Integrated WLAN (802.11a/b/Draft N); Bluetooth
Ports (Partial List)	Ethernet; USB 2.0 (x2); FireWire 800; Mini DisplayPort	Ethernet; USB 2.0 (x3); FireWire; VGA; DisplayPort	Ethernet; USB 2.0 (3x); FireWire; VGA	Ethernet; USB 2.0 (x2); VGA
Battery Life (Max. Per Charge)	5 hours	2.4 hours	4.3 hours	Varies
Price (Base Configuration)	$1,999	$1,099	$1,653	$1,399.99

16-inch & Larger Notebooks

Image courtesy of Apple

Model	Apple 17-Inch MacBook Pro	Dell Precision M6400 Covet Mobile Workstation	MSI Computer EX620-1W1US	Toshiba Qosmio X305-Q715
Other Models In Line	MacBook; 15-Inch MacBook Pro; MacBook Air	Precision M4400, M6400	EX625-227US	Qosmio X305-Q711, -Q720
Screen Size	17 inches	17 inches	16 inches	17 inches
Dimensions (HxWxD)	0.98 x 15.47 x 10.51 inches	1.35 to 1.5 x 15.4 x 11 inches	1.4 to 1.63 x 13.66 x 9.68 inches	1.7 to 2.5 x 16.2 x 12 inches
Weight (With Standard Battery)	6.6 pounds	8.5 pounds	5.95 pounds	8.99 pounds
Operating System (Default; Optional)	Mac OS X v10.5 Leopard	Windows Vista Business SP1; Vista Ultimate	Windows Vista Home Premium	Windows Vista Home Premium
Processor (Base Configuration; Maximum Optional)	2.66GHz Intel Core 2 Duo	2.66GHz Intel Core 2 Duo T9550; 2.53GHz Intel Core 2 Extreme QX9300	2GHz Intel Core 2 Duo T6400	2.53GHz Intel Core 2 Duo P8700
Memory (Base Configuration; Maximum Optional)	4GB DDR3 SDRAM; 8GB	2GB DDR3 SDRAM; 4GB	4GB DDR2 SDRAM	4GB DDR3 SDRAM
Storage (Base Configuration; Maximum Optional)	320GB SATA 5,400rpm; 320GB SATA 7,200rpm or 256GB SSD	160GB SATA 7,200rpm; 320GB SATA 7,200rpm or 256GB SSD	320GB SATA 7,200rpm	320GB SATA 7,200rpm
Optical Drive (Base Configuration; Maximum Optional)	8X SuperDrive	8X DVD±RW	DVD SuperMulti	DVD SuperMulti
Graphics	Nvidia GeForce 9600M GT with 512MB GDDR3 and Nvidia GeForce 9400M with 256MB DDR3 SDRAM shared with main memory	Nvidia Quadro FX 3700M 1GB Discrete Video Card	ATI Mobility Radeon HD 3470 with 256MB memory	Nvidia GeForce 9800M GTS with 1GB memory
Wireless Technologies	AirPort Extreme Wi-Fi (802.11 Draft N); Bluetooth 2.1 +EDR	Dell Wireless 1397 802.11b/g Mini Card	Integrated WLAN (802.11b/g/Draft N); Bluetooth 2.0 +EDR	Intel WiFi Link 5100AGN (802.11a/b/g/Draft N)
Ports (Partial List)	Ethernet; USB 2.0 (x3); FireWire 800; Mini DisplayPort	Ethernet; USB 2.0 (x4); FireWire; VGA; Display Port	Ethernet; USB 2.0 (x3); VGA; HDMI	Ethernet; USB 2.0 (x4); FireWire; VGA; DisplayPort
Battery Life (Max. Per Charge)	8 hours	10 hours (with optional 9-cell battery)	Varies	Varies
Price (Base Configuration)	$2,499	$3,310	$729.99	$1,649.99

TAKEAWAY
Three words best suit MSI's new notebook: light, slim, and aesthetic.

X340

There's no reason high efficiency and charming design can't go hand in hand. With the stylish X340 from MSI, you get both. Part of the new X-Slim series, the X340 is super-thin (0.78 inch at its thickest, 0.24 inch at its thinnest), super-light (2.86 pounds, including a 4-cell battery), and super-efficient. MSI's exclusive ECO engine lets you quickly choose a power mode that corresponds to what you're doing with the notebook—say, watching a presentation or movie as opposed to using productivity software or surfing the Web. The included 4-cell lithium-polymer battery provides up to 3 hours 20 minutes of power per charge.

When you need a break from work, the X340 is there for you with great entertainment features. The notebook includes an HDMI port and Blu-ray playback for your high-definition enjoyment. Its 13.4-inch screen offers widescreen (16:9 aspect ratio) viewing. The LED backlight makes images look brilliant without drawing much power, and dual headphone jacks let you share the sound. For style on the go, the X340 delivers.

Key Facts

- The X340 offers long battery life thanks to the combination of the Intel® CULV platform and MSI's exclusive ECO technology
- MSI doesn't let the X340's slimness interfere with its features, as happens in other slim notebooks; a card reader and D-sub, HDMI, Ethernet, and USB 2.0 ports are built in
- Competitive pricing makes the X340 a bargain compared to comparably sized notebooks

Tech Specs

- 13.4-inch screen
- 2.86 pounds (with 4-cell battery)
- Windows® Vista Home Premium
- Intel® Penryn Core™ 2 Solo SU3500
- 2GB DDR2 memory
- 320GB SATA hard drive
- 802.11b/g/Draft N
- Bluetooth® 2.0 +EDR
- 2-in-1 (SD/MMC) card slot
- USB 2.0 (x2), D-sub, HDMI, and Ethernet ports
- 1.3MP Web camera

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Quick Guide To Mobile Gear

by Tessa Warner Breneman

There are plenty of gadgets and accessories to help you stay on top of your workload and your personal life. Here are some tips for purchasing mobile gear.

Know Your Type

BEFORE you run off to purchase extra storage for any device, determine exactly what you need. Devices are compatible with different expandable memory cards, including Compact Flash, SD, SDHC (High Capacity), microSD, microSDHC, xD-Picture Card, and Memory Stick.

To determine which memory card is compatible with your gadget, consult the device's users manual or the manufacturer's Web site. Most memory card manufacturers will provide a list of cards that are well-suited for a specific make and model of consumer-electronics devices, be it a digital camera, MP3 player, mobile phone, smartphone, or handheld PC.

Mobile Broadband

MOBILE broadband uses cell phone signals to connect your mobile phone and notebook to wireless high-speed Internet connections. The top wireless carriers—AT&T, Sprint, T-Mobile, and Verizon—each operate on different mobile broadband connections.

GSM (Global System for Mobile Communications) and CDMA (Code-Division Multiple Access) are the two available types of mobile broadband networks. CDMA is generally faster than GSM and can handle more users on a given frequency. GSM, however, has better global coverage and gives you a better connection should you be in a location with obstructed signals.

Accessorize

TO MAKE the most of your mobile device, be sure it's properly accessorized. Consider how and where you use your electronic devices. If you're a gym rat, for example, you'll want a comfortable armband and lightweight headphones for your digital audio player so you can focus on your workout and not fumble with your device. If you spend a lot of time in your car, a Bluetooth headset and dashboard mount for your smartphone will guarantee you keep your eyes on the road. If you are constantly on the go, a portable mouse is an ideal addition to your laptop bag. Finally, every traveler with mobile gear can benefit from a mobile power pack that lets him charge several mobile gadgets at once.

Listen Up

WHETHER you want to listen to tunes on your iPod or chat on your phone, you'll need comfortable earphones or a headset. Headsets are useful when paired with Bluetooth technology because you can chat on the phone wirelessly.

Depending on your personal preferences, you can find earphones that rest on the outside of your ears or earbuds that rest inside the ear. Additionally, you'll encounter noise-cancelation technology, which cuts down on the ambient noise. Passive noise-canceling technology uses physical material to block noise, while active noise-canceling technology uses incoming sound waves (noise) and the sound waves produced by the active noise-canceling headsets to cancel each other out.

DIGITAL CAMERA 101

Road warriors such as yourself can benefit from a digital camera to keep track of all the places they go. Here are a few terms to know as you compare models.

Digital zoom—You can use your camera's digital zoom to magnify and crop images recorded on your camera. Your photos are interpolated with pixels, so some of the quality of an image could be compromised through this process.

Megapixels—This number determines how large your photo prints will be. Note that a high megapixel count does not equate to high-quality photos.

Optical zoom—This feature lets you physically move the lens to make your subject appear larger in the photograph. When it comes to optical zoom, a higher number is better.

Resolution—A high resolution means more pixels and more detail in an image; therefore, the higher the resolution, the higher the quality.

TAKEAWAY
AetherPal provides one support solution for multiple operating systems.

AetherPal™

AetherPal™

When it comes to accessing, maintaining, and supporting smartphones company-wide, words like "fast," "lightweight," and "real-time" are music to your support staff's ears. You can deliver exactly that by using w2bi, Inc.'s AetherPal solution. AetherPal is a support tool that enables remote troubleshooting, updating, software installation and configuration, training, notifications, content delivery, and more across smart phones. Whether your support staff needs to view or manage an individual's device or a group of devices, AetherPal provides that capability. AetherPal supports BlackBerry®, BES, Microsoft® SCMDM 2008, Windows Mobile®, and Symbian devices. Android™, Apple® iPhone™, and Palm® support is forthcoming.

Key Facts

Remote Control

- Real time virtualization of smartphones with full administrative control
- Powerful, efficient, & cost effective troubleshooting and training tool

Banner Notification

- Innovative, eye catching, & effective method of messaging and getting confirmations
- Delivery of banners independent of e-mail or SMS

Low TCO = Fast ROI

Lowers operating costs by decreasing

- Problem-to-fix ratio
- Number of duplicate issues from an end user

Supports Windows Mobile, BlackBerry and Symbian devices

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TAKEAWAY
Contact Manager makes it fun, fast, and easy to work with your contact info.

Key Facts

- Touch-optimized interface and easy navigation
- SMS chat and call history
- Facebook integration
- Totally customizable Today screen plug-in
- Tools to mark favorites and track statistics
- Quick Search function using keypad
- Phone profile and "send contact" capabilities
- Map for locating addresses
- SMS and contact export

Resco Contact Manager 2nd Edition

Resco Contact Manager 2nd Edition is a fully touch-optimized program with superior tools that help you manage your contacts, calls, and text messages. Since its official release, the application has gained favorable attention, and now many users say it's the contact management tool they have been looking for. The application lets users navigate easily, search quickly using letter navigation, view text message conversations in a chat-like view, and much more. Facebook integration helps you stay in touch with all of the friends in your network. No other contact manager available in today's Windows Mobile® market can provide such complex information about each phone contact.

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TAKEAWAY
Project a 50-inch image from the palm of your hand!

Key Facts

- LCoS digital imager and LED light source
- Built-in media player with support for AVI, WMV, JPG, and other formats
- 1GB onboard memory and a microSD™ slot
- True VGA (640 x 480) resolution
- Rechargeable lithium-ion battery
- Supports a wide range of input devices

P1 Pico Projector

The AAXA P1 Pico Projector offers industry-leading performance and features in this hot, new product category. The P1 brings pocketable, cordless projection technology to a wide range of applications, including watching movies, making impromptu presentations, sharing photos and videos from digital cameras, and other activities in environments where access to dedicated displays and power sources are limited. The ultra-mobile P1 weighs only 6 ounces yet provides a 12-lumen output and VGA (640 x 480) resolution. The P1 is even capable of producing a 50-inch or larger image in low-light environments. The P1 supports many input sources, including VGA, composite, iPod®, iPhone™, PlayStation®Portable, and Zune®.

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How To Find Mobile Software

Navigate The Web For Apps That Fit Your Needs

Smartphones serve different purposes for many people. Thus, the ability to download software that fits our needs is beneficial. An abundance of programs is available on the Internet, but narrowing down apps that will work for us can sometimes be difficult. Lucky for you, there are Web sites that aggregate all the latest software according to a smartphone's platform. You can also browse popular business smartphone software manufacturer sites, or simply look through the application stores associated with your phone, such as the iTunes App Store and BlackBerry World.

Sites Worth Seeing

Before app stores became popular, many smartphone users found their mobile software through third-party Web sites known for offering applications for specific platforms. A number of these sites combine downloads with other features smartphone users find interesting, such as mobile news, blogs, and accessories.

Brighthand.com is known for delivering current news regarding mobile technology and offers reviews for smartphones and other mobile devices. The site also offers a store (software.brighthand.com), which provides software for your mobile phone in addition to useful accessories. Among the program categories on the site, you'll find Business & Finance, Education & Reference, Professional, and Travel; and accessories, including batteries, Bluetooth headsets and kits, memory cards, screen protectors, styli, and chargers. The Brighthand Store offers a comprehensive list of handsets and platforms, as well, so regardless of what type of phone you use, you'll likely find software that suits your needs.

MobileTopSoft (www.mobiletopsoft.com) also offers downloads for various smartphone platforms, in addition to the latest mobile news. You can find applications, such as games, business software, productivity applications, LBS (location-based service), and more for Windows Mobile Standard and Professional, Symbian, and Palm OS and Treo.

You won't find news and other information relating to the mobile world at PocketGear.com, but you will find a variety of mobile applications and platforms. This site is home to games and entertainment downloads as well as business, education, financial, productivity, and travel software. In addition to the available applications, you can also purchase themes and ringtones to add a more personal touch to your smartphone. PocketGear.com manages multiple distribution channels in addition to the PocketGear.com site: SymbianGear (www.symbiangear.com), PalmGear (www.palmgear.com), RimGear (www.rimgear.com), Smartphone.net, and AndroidGear (www.androidgear.com). These sites offer the same catalog of apps offered on the PocketGear Web site, but they break down the software by platform so users can find the right type of software for their handset more easily.

Download.com, which is a popular site for computer software downloads, also offers mobile downloads for smartphones and standard mobile phones. With a mix of both paid and free software downloads, you can find programs for BlackBerry, iPhone, Palm, Symbian, and Windows Mobile phones. You can browse the top downloads of the week to see what other smartphone users find useful, or you can search by category, such as games, utilities, operating systems, education, business-oriented downloads, and others.

Good For Business

If you'd rather not search through thousands of applications by just as many different developers, there are several mobile

The ability to download software to a smartphone assures users that their smartphones will be able to provide what they need.

software manufacturers that provide beneficial business software on their Web sites.

DataViz (www.dataviz.com) is well known for its Documents To Go program, which delivers Microsoft Word, Excel, and Office to platforms such as BlackBerry, Android, Windows Mobile (Standard and Professional), Symbian, Palm OS and webOS (for the Palm Pre), and, most recently, the iPhone OS. In addition to Documents To Go, DataViz provides its RoadSync program, which securely synchronizes your Windows Mobile, Palm, Android, and Symbian smartphone with Microsoft Exchange Server 2003/2007. Beyond Contacts for Palm brings Microsoft Outlook capabilities to your handset, and SmartList To Go (also for Palm OS) helps you create and control lists and databases on your phone.

Ilium Software (www.iliumsoft.com) offers a variety of programs for BlackBerry, iPhone, Palm OS, and Windows Mobile handsets. For managing your finances, whether you are on the road or at home, you can purchase Keep Track for Windows Mobile, which lets you track withdrawals, deposits, checks, and charges to your accounts. eWallet (available for BlackBerry, iPhone, Palm, and Windows platforms) is a password manager that keeps track of passwords for all your business and personal accounts with 256-bit AES (Advanced Encryption Standard) encryption to ensure you won't forget or lose passwords for any of your accounts.

Handmark (www.handmark.com) offers a widespread set of applications for a range of handset platforms, including Android, BlackBerry, iPhone, Palm OS, Symbian, and Windows Mobile. myLocker ($3.99 per month) lets you back up and sync your media files and then share those files with your contacts, so you won't ever lose your multimedia files. Pocket Express is Handmark's spotlight app, and it delivers free news, sports updates, entertainment news, weather forecasts, stock updates, travel news, maps, and other information to your mobile phone. The app has a clean user interface and lets you search for businesses in your area and shop for mobile phone apps and ringtones.

Just For Your Platform

Since Apple's success with the iTunes App store for the iPhone, other smartphone makers have implemented stores of their own. Recent examples include Android Market, BlackBerry App World, Nokia Ovi store, and the soon-to-launch Windows Marketplace for Windows Mobile.

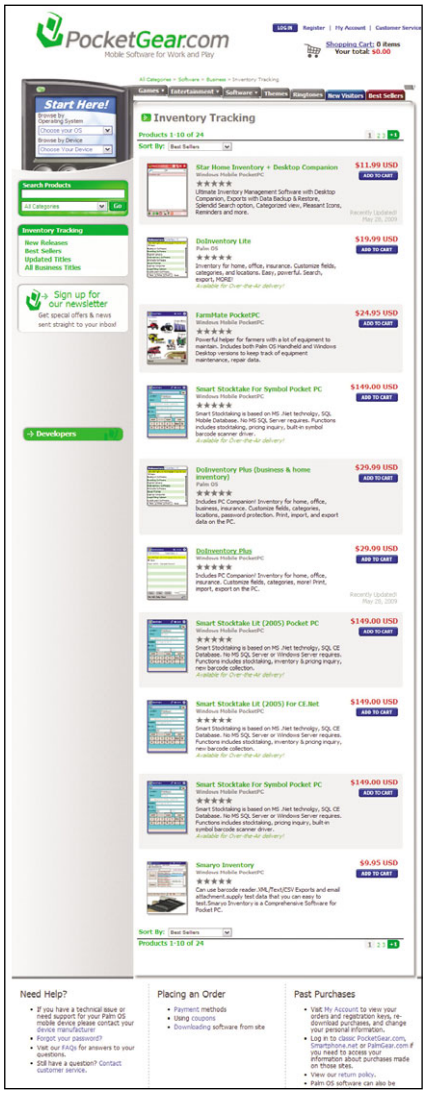
To gain access to the app store appropriate for your platform, you need to download the store application to your phone. From there you can browse categories, such as business and productivity applications. Each store has a mix of free and paid applications, with user ratings so you can see if others have been satisfied with an application before you download it to your phone.

The biggest difference between downloading content from an app store and finding it elsewhere on the Internet is the control manufacturers have over which applications they allow into their app stores. This isn't to say programs are better or worse if you don't find them in any of the app stores, but you can be sure what you're downloading is designed just for your type of phone and that it has been authorized on some level by your phone's manufacturer.

Still missing from the world of app stores, however, is the Palm Pre webOS app store. So far, Palm has not made any announcement to implement one soon.

Make It Yours

The ability to download software to a smartphone assures users that their smartphones will be able to provide what they need. Regardless of whether you're looking for business applications, productivity software, navigation and LBS apps/services, or games, you can download them onto your phone to ensure you'll always have just what you're looking for right when you need it most.



You can purchase business software, such as inventory tracking programs, from PocketGear.com.

by Tessa Warner Breneman

Download & Installation Advice

Fix Mobile Phone Software Setup Problems

Finding the perfect application for your mobile phone can be an exhausting process. So when programs have trouble installing, frustration is understandable. We'll help you overcome common problems that occur when you're obtaining mobile apps.

Seek Harmony

Does the application support your mobile phone's operating system? For example, some applications that run on Windows Mobile phones won't always support older or newer versions of an OS. You may also need to select another edition of an application that's designed to work with a touchscreen or non-touchscreen mobile phone, depending on your phone's interface. If you purchase the wrong version, you can typically exchange the program you downloaded for another version (of the same application) that is compatible with your mobile phone.

The Unreachable Phone

Often, you can choose to download an app to your PC or send it directly to your mobile phone. If you choose to send it OTA (over-the-air) to your mobile phone, the vendor typically sends you a text message or email with a link to the installation file. Click the link to launch your phone's mobile browser to begin the download process.

When you select the download to PC option, the software vendor will likely ask if you want to download an EXE setup file, which will copy the necessary files and install the application on your mobile phone or provide an installation file that you'd copy to and run on your mobile phone. Either way, the PC installation will involve downloading the setup file and transferring it, so you must have your mobile phone connected to your PC.

If your Web browser, firewall, or antivirus software features high security settings, it is possible your PC's security tools may block the pop-up window from appearing on-screen or the EXE file from reaching your PC. For example, if you use Internet Explorer and you set the security level to High, the browser won't let you download the EXE file. However, you can make an exception for a Web site in IE. Click the Tools menu, select Internet Options, and choose the Security tab. Select Trusted Sites from the list of zones and click the Sites button. In the resulting dialog box, enter the Web site's address into the Add This Website To The Zone field, click the Add button, and then click the Close button. You may also need to change how your browser manages cookies, which are files Web sites send to your PC that recognize your computer and enable personalization on return visits. To manage cookies in IE, open the Internet Options dialog box and

Sometimes, you may choose to download the trial version of an application and upgrade later on.

click the Privacy tab. Click the Sites button, and you can manage sites, specifying which sites you'll allow to use cookies. If you suspect your firewall or antivirus program is blocking an application from downloading, check the program's users manual for how to make an exception.

When selecting an application to download, make sure you select the version that matches your phone's operating system.

Necessary Intermediaries

Depending on the OS, you may need to install an application or a driver that lets you transfer data between your PC and mobile phone. For example, if you own a Nokia device, some applications will only install from a PC where you've installed the Nokia PC Suite. If your mobile phone runs Windows Mobile, Windows XP users will need to download ActiveSync, while Windows Mobile users with computers that run Windows Vista must download Windows Mobile Center. If you own an iPhone, you'll need to use iTunes to download to your PC and then install the application to your phone. BlackBerry owners will need to download BlackBerry Desktop Software.

No Room At The Inn

Do you receive an error message, such as "Installation failed: check available memory" or "Cannot install, memory full" when you attempt to install an application? If so, you may need to install the app onto the memory card in your smartphone rather than take up space on the phone's built-in memory. Typically, a mobile application installer will begin by asking you whether you want to save the program to the phone's internal memory or to the removable memory. We should note that some applications can only install to a phone's internal memory, so you may need to remove an existing program from your phone before installing the new app. Then you can try installing the program you removed to the phone's memory card.

It's also possible that the removable memory card in your mobile phone is full. Consider uninstalling any apps you no longer use to make room for a new program. Alternatively, you could purchase a memory card with a large enough capacity to handle all the applications or use multiple memory cards and switch them out, depending on the app you need to use.

To avoid error message issues, check the amount of free space available on your phone's internal and removable memory. Although each smartphone OS is different, you can view the phone's memory capacity via the phone's settings or system information. For example, on the BlackBerry Storm, click the Settings button, choose Options, and select Memory. You'll see the amount of free space for the BlackBerry's internal memory and the memory card.

Trial Is Over

Most mobile applications are available as free trials for a limited amount of time, and in some cases, the trial and registered versions are identical—except the trial version will stop working after the given time period. Typically, mobile application vendors maintain a record of your purchase history that lets you view or download the programs you bought. If an app prompts you for verification information, visit the Web site where you acquired the software and see if the details include the registration key or similar authentication data.

Try Again

During the download process, an error may have occurred that prevents an app from installing properly. If you tried some of the troubleshooting tips we suggested in the previous paragraphs, you might try downloading the troubled app again. If you experience error messages during the installation process, check with the software's original developer regarding the problem.

by Nathan Lake

In some cases, you can choose to download an EXE file that will run on your PC or a file that will run directly on your mobile phone.

Productivity Software

Get Even More Done With Your Smartphone

The advent, implementation, and continued improvement of smartphone technology has been an enormous boon to those who want to stay productive and organized on the go, whether it's in a faraway city on a business trip or just lunch away from the office. We took a look at 10 of the most useful productivity apps available for mobile devices. Some are platform-specific, while others will work on just about any mobile device. Take a look and see which tools you can download to give your professional life an efficiency boost.

ABBYY Business Card Reader 2.0

Anyone who has made the rounds at a business convention with a stack of business cards can attest to the need for an application that automatically enters contact information from cards. ABBYY has developed just such as application: ABBYY Business Card Reader 2.0 ($24.99; www.abbyy.com).

Using the smartphone's camera, ABBYY scans the image of a business card and automatically "reads" the contact data and enters it into the corresponding fields in your smartphone's address book. You can review the data in your address book prior to saving the contact, ensuring accuracy. Additionally, you can add a photo to the new contact information without having to exit the program.

ABBYY Business Card Reader recognizes 16 different languages, enabling you to import contact information even from international contacts, and works on phones running the Symbian platform.

Bento 2

FileMaker's Bento 2 ($4.99; www.filemaker.com), surprisingly full-featured given its low price, is a database application that is available only for iPhone and iPod touch. The portable version of the identically named Mac application, Bento 2 for iPhone/iPod touch helps you organize contacts, calendars, emails, events, files, and photos all in one place. Built to require essentially no learning curve for users, Bento 2 is ideal for people who have never used database software.

The software syncs with Bento 2.0v4 or later on a Mac as well as any other devices portable or otherwise running Bento 2. Any changes you make in Bento 2 automatically sync with the other devices on the sync list.

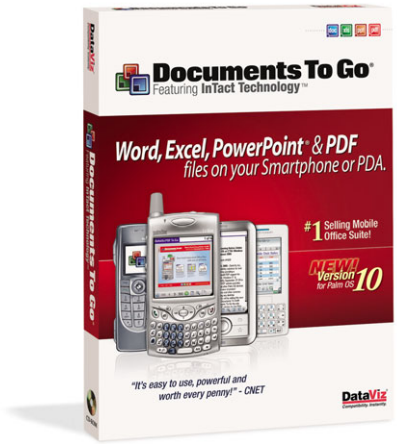
Other features include links to Address Book and iCal data, built-in database templates, and iTunes-style search capabilities. Another bonus is the ability to import Excel or Numbers worksheets and then to immediately access, organize, and integrate the data.

Documents To Go

DataViz Software's Documents To Go (price varies by platform; www.dataviz.com) fulfills the dreams of everyone who ever wished they could work with office software on their smartphone. This app allows you to view, edit, and even create Microsoft Office 2007 documents on your mobile device. It even has a PDF reader (called PDF To Go) thrown in for good measure.

Documents To Go runs Word, Excel, and PowerPoint 2007 documents natively; this lets you retain file formatting using DataViz's own InTact Technology. Other features include a "home" screen showing recently accessed documents, a file browser to make locating and opening documents quick and easy, and various connectivity and synchronization features (which differ according to the platform you're using).

Documents To Go is available on most mobile platforms, including Android,



Documents To Go from DataViz lets you view, create, and edit Microsoft Office 2007 documents and even has a PDF viewer thrown in for good measure.

Already available as a desktop application, the mobile version of FileMaker's Bento 2 is a database application that can sync with other devices running the software.

BlackBerry, iPhone, Palm OS, Symbian, and Windows Mobile, with support for Palm's webOS coming up later this year. A free 30-day trial is available.

Google Sync

You like using both your Windows Mobile-based phone and Google's many free online tools; why not synchronize them? Google Sync (free; www.google.com) is an application that keeps the built-in Windows Mobile calendar and contacts on your phone in step with the calendar and contact info in your Google account.

Specifically, you can sync Contacts and Calendar events. Any changes you make to your online Google account can be pushed out to your smartphone. You can adjust the settings to receive calendar alerts whether you make changes on your PC or on your phone. Although it's still in beta, Google Sync is a useful tool to have in your kit.

JETCET PDF

Westtek's JETCET PDF (free; www.westtek.com) is a PDF viewer for Android phones. There's not much else to it, really; its simplicity is probably its best asset.

JETCET PDF retains all original formatting in documents transferred from a computer, received via email attachment, or downloaded from the Internet. It also supports password protection for files, including 40-bit and 128-bit encryption as well as navigational tools and bookmarks. The bottom line is that JETCET PDF provides you with an uncomplicated, easy way to view your PDFs whenever you need them.

JoikuSpot is designed to replace USB modems and Bluetooth devices for Internet access, allowing you to instead use your smartphone as a modem.

JoikuSpot

In retrospect, it was really just a matter of time until someone developed this product: an application that essentially makes your phone a wireless 3G hotspot. Joikusoft's JoikuSpot ($14.99; www.joikushop.com), which works on Symbian phones as well as the iPhone, shares your phone's 3G connection with Wi-Fi-capable devices such as notebooks and MIDs (mobile Internet devices).

JoikuSpot is designed to replace USB modems and Bluetooth devices for Internet access, allowing you to instead use your smartphone as a modem. Multiple devices can use it simultaneously, and you can even secure it as you would any Wi-Fi connection. It also includes VPN support, so you can access your company's servers to retrieve files and check your Outlook email. To be truly useful, JoikuSpot effectively requires an unlimited high-speed 3G data plan. If you use JoikuSpot on your smartphone to browse the Internet from your netbook, you'll be using up quite a bit of your allotted data plan.

OI Notepad

Based on Google's open-source notepad application that comes with Android, OpenIntents OI Notepad (free; www.openintents.org) lets you create, edit, send, and delete notes from your Android-powered phone. The app lets you filter notes, sort them alphabetically or by the date of the latest modification, and will open and save files to and from an SD card. When you want to send a note, OI Notepad will simply use your preferred email client.

There is a host of extensions available for OI Notepad, too. These extensions grant you the ability to, among other things, add recorded messages to notes, encrypt notes,

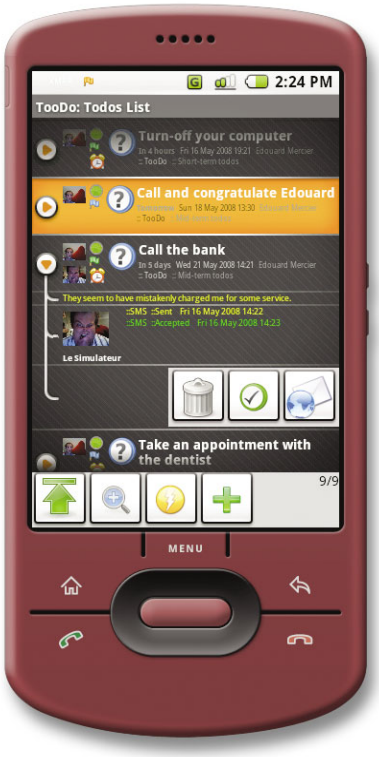
Part of the great advantage of using a mobile phone is the ability to do business anywhere, anytime.

and automatically receive updates as soon as they become available.

Smart Recorder

Part of the great advantage of using a mobile phone is the ability to do business anywhere, anytime. However, the downside of being able to take a phone call while going for a jog or juggling lunch and a few errands is that you generally aren't able to write down important notes from the call. Migital Smart Recorder ($4.99; www.migital.com) is an application that records your incoming and outgoing calls and saves them to either the phone's internal memory or on a memory card. It works on most Nokia phones as well as some Samsung, Panasonic, and LG handsets.

Features include the ability to record your personal voicemails via hotkey and play back the recordings anytime you wish. Smart Recorder runs transparently when you turn your phone on, so it will record your calls without you having to do anything. One other bonus: You can check out a free trial of Smart Recorder to check it out before you buy.



You can keep your to-do list working for you with TooDo, an app that sends you alerts and suggestions for tasks to complete from your list according to geographic, contextual, and time-related factors.

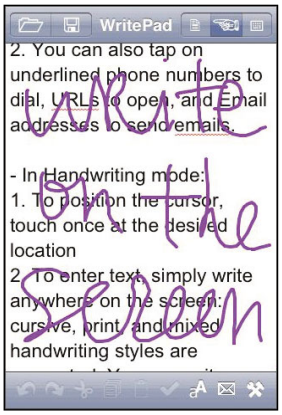
TooDo

What list of productivity apps would be complete without a to-do list application? If you're hunting for a good one for your Android phone, consider TooDo from Édouard Mercier (free; edouardmercier.fr/toodo). TooDo features geographically based notifications; thus, the program may remind you to pick up some milk when it detects that you're near a grocery store. It also gives you notifications based on context and time. For example, if you're supposed to call a certain contact, TooDo may remind you to call another on your list while you're at it. If a deadline is approaching, TooDo can send you a reminder, as well.

TooDo syncs with other task-list-type apps and services such as Remember The Milk and Toodledo. You can set reminders in a variety of formats, including text, audio, and video and send them via SMS (Short Message Service) text, a phone call, or an email message.

WritePad

One of the most frequent complaints of smartphone users is that typing on miniature keyboards can be tedious. WritePad from PhatWare (free; $8.99 for the pro version; www.phatware.com) is a text editor for the iPhone that utilizes advanced handwriting recognition input. Designed to let you easily switch between handwriting and text input via the on-screen keyboard, WritePad lets you simply write on the screen with the tip of your finger.



WritePad is a handwriting recognition application from PhatWare that "reads" whatever you write by hand on the touchscreen and translates it into text.

The handwriting analysis technology built in will recognize cursive, print, and mixed handwriting styles. A handy (pun intended) Shorthand feature lets you insert common words easily without having to write or type them out. In addition to being able to use fingertips as styli, you can also use finger gestures to perform common editing tasks such as cut, copy, paste, and more. Other handy WritePad features include a spell checker and a context analyzer.

Apps Aplenty

These are just a few of the many, many productivity applications available for smartphones. The respective app stores or app markets for every smartphone platform are growing daily with new tools to boost your productivity. Check them out and discover new ways to save time and become more efficient as a mobile business professional.

by Seth Colaner

Find It With Your Smartphone

Useful Navigation & Location-Based Software

Navigation and location-based applications on your mobile phone can come in handy just about any time you are headed out the door. Many of these applications feature maps and driving directions, while others are designed to provide information about restaurants, hotels, and other attractions in the area (wherever you may be). Some programs combine all of these features; some add traffic flow information and more. Navigation and location-based services are available whether you carry around a BlackBerry, iPhone, Windows Mobile phone, or any other type of smartphone. Some of these services will even work with smartphones that don't have built-in GPS chips, which let you enjoy many of the benefits of a GPS-enabled phone if you don't own one. Read on to find a navigation program that will work best for you, your phone, and your lifestyle.

AT&T Navigator

AT&T Navigator ($9.99 per month; wireless.att.com) offers voice-activated turn-by-turn directions with automatically updated traffic reports, estimated time of arrival, and your remaining distance. You can get both vehicle and pedestrian directions, and you can program Commute Alerts to receive automatic traffic updates based on a specified route via email, SMS (Short Message Service) text, or AT&T Alerts.

AT&T Navigator's Drive To section offers a list of favorite locations; recent places you've searched; and inputs for an address, intersection, city, or business. Additionally, you can search for businesses and services in your area, such as public Wi-Fi hotspots, parking lots, taxi services, restaurants, and more. The service also provides business details, such as customer reviews and ratings. Finally, AT&T Navigator lets you share addresses with other AT&T Navigator users.

Garmin Mobile

Those familiar with Garmin's in-car units can download Garmin Mobile (prices vary; www.garmin.com) on their GPS-enabled phones and enjoy many of the same features with a familiar interface. The Where To? button brings up input options, such as address, intersection, and city, and a list of favorite locations. You can also find restaurants, hotels, and other points of interest quickly. Along the same lines, Garmin Mobile includes a Google-powered local search engine to help you find area attractions, hospitals, automobile services, and other useful locations.

Garmin Mobile lets you check on a flight status or browse photos of locations in your area that other Garmin Mobile users have added. When you select a photo, Garmin Mobile provides you with directions to the location where the photo was taken.

Garmin Mobile provides voice—guided, turn-by-turn directions in the map view and lets you optimize the route time (that is, you can find a faster time or shorter distance) and change the means of transportation (such as by car, motorcycle, bicycle, or foot). Garmin Mobile also keeps you updated on traffic and weather conditions. Garmin Mobile XT for GPS-enabled smartphones costs $99; Garmin

Garmin Mobile looks similar to what you see on Garmin's in-car GPS units, making it user-friendly for Garmin lovers.

MapQuest on your mobile phone comes as either a free application or a paid download.

Mobile 10x for smartphones without GPS costs $199 and comes with a compact GPS receiver for convenience.

Google Maps

For mobile phones with or without GPS capabilities, Google Maps for mobile (free; www.google.com/gmm) helps you quickly find the way to your destination. The My Location feature will help pinpoint where you are (with or without GPS) within 2,100 meters, and that, in turn, helps to determine where, for instance, the nearest dry cleaner is located.

Google Maps lets you search for anything you may need to find, and it provides driving, transit, and walking directions to and from addresses. Google Maps for mobile also offers Google Street View, which shows photos of upcoming destinations, and provides real-time traffic updates. Finally, you can find and connect with friends via Google Maps if you set up a Google Latitude account. Google Latitude shows your location and the locations of contacts, and it lets you connect with them through SMS, IM, or a phone call.

MapQuest

MapQuest gained popularity as one of the first Web-based navigation services, and now you can access those same services with a variety of applications for your mobile phone. MapQuest Navigator 5.0 (price varies; wireless.mapquest.com) works with GPS-enabled phones to provide voice-guided turn-by-turn directions for driving and walking. With MapQuest Navigator 5.0, you can choose alternative routes to skip over highways, toll roads, and busy streets. You also get real-time traffic updates and access to AOL's City's Best product, which provides ratings for restaurants and other establishments. The MapQuest database offers millions of points of interests for you to search and night mode that cuts the backlight glare, which is great for low-light driving conditions.

MapQuest 4 Mobile is a free download for smartphones. It offers a handful of the features included with MapQuest Navigator 5.0, such as driving directions, maps, live traffic updates, and search capabilities. There is also a separate iPhone application from MapQuest, called the MapQuest 4 Mobile For iPhone.

Where

Where (www.where.com) is a mobile application that combines a handful of location-based services in a single mobile application. You can use it to find information about local events, weather, news, various services, restaurants, and more.

Google Maps for your mobile phone provides many of the same features as the Web-based Google Maps, such as Street View.

Where combines a handful of location-based applications and combines them into a single application.

With Windows Live Search, you can also compare fuel prices for gas stations in your area, check the weather forecast, find movie showtimes, and aggregate information for specific items (such as real estate) in your area.

The Directions link will provide you with both walking and driving directions, and the GasBuddy tie-in helps you compare the gas prices of fuel stations closest to you. Buddy Beacon, which couples GPS capabilities with social networking, is a featured program within the Where application. Designed to help you find your contacts, Buddy Beacon (registration required) pinpoints both your location and their location to make it easier to find one another.

Where also includes AccuWeather, which delivers weather conditions, radar, and forecasts in your area (or the location you plan to visit), and YellowPages, which lets you quickly look up local businesses. If you're done with meetings for the day or looking to entertain clients, the Eventful Events feature can inform you of local happenings. Other programs within Where include Yelp, which provides local business and restaurant reviews, and Topix, which provides local news and classifieds listings.

Windows Live Search & Bing For Mobile

Bing's mobile Web site lets you search for locations and directions on a map.

Microsoft is in the process of transitioning the Windows Live Web search brand to Bing, and at press time, they offer two different location-based services with each brand. Windows Live Search For Mobile (free; mobile.search.live.com) is a mobile application you can download onto any smartphone. Through its search capabilities, it can locate the nearest businesses by name or category, such as restaurants, coffee shops, retail stores, universities, libraries, hotels, and any other type of business you can think of. It includes speech recognition, so all you have to do is speak the name or the address into your phone, and Windows Live Search will find it for you. Its mapping and navigation feature lets you get driving or walking directions, and it offers traffic information so you can prepare yourself for driving challenges on your route. With Windows Live Search, you can also compare fuel prices for gas stations in your area, check the weather forecast, find movie showtimes, and aggregate information for specific items (such as real estate) in your area.

Bing For Mobile (m.bing.com) offers similar features through the Bing mobile site, including turn-by-turn directions, maps, weather reports, and movie showtimes. Just like with Windows Live Search, you can get both driving and walking directions, check traffic flows, and search for any type of business in your area. Bing For Mobile also lets you make a dashboard to include personalized information, such as stocks, on your mobile Bing home page.

Yahoo! Go

Yahoo! Go (www.yahoo.com/go) offers all of Yahoo!'s mobile features in a single mobile application. Y! Maps provides a bird's-eye view of your location and a City Guide for your city or an upcoming destination city. The City Guide features information about (and, in some cases, reviews of) restaurants, bars, hotels, special attractions (such as galleries and zoos), and shopping centers. You can map, get directions to, and share all of these locations through Yahoo! Go. The City Guide also provides images from Yahoo!'s photo site, Flickr (www.flickr.com).

Yahoo! Go features a carousel of applications, such as Y! Maps and City Guide, to help you find everything and anything you need in your area.

Y! Maps can find points of interest, such as gas stations, ATMs, and coffee shops; driving directions to any address; and traffic information. In addition to its mapping and location-based services, Yahoo! Go includes access to your Yahoo! email account and news.

Zagat To Go

Zagat is known for its comprehensive lists of city attractions (such as restaurants, nightlife, and hotels) and other interesting spots for travelers and residents alike. The mobile application, Zagat To Go 7.0 ($29.99; mobile.zagat.com), couples Zagat's list of more than 40,000 establishments with your phone's GPS capabilities so you can easily retrieve maps and driving directions. The program integrates with other features on your phone so you can, for example, click to call and make reservations at a hotel or restaurant and then add the dates and times in your calendar.

With Zagat To Go, you can search for the best golf courses in the area or find the hotels nearest the airport or with the highest ratings. If you already have a place to go in mind, you can use Zagat To Go's advanced search capabilities to pinpoint any establishment in the area or only those establishments that come highly recommended.

by Tessa Warner Breneman

Communication Software

Sync, Send & Share

Smartphone software is continually evolving as portable means of communication become more sophisticated. Now that multiple communication tools are converging in single devices, mobile app developers recognize the demand for simple-to-use, efficient, and intuitive software. We'll introduce some communication-oriented apps that will maximize your smartphone's capabilities through messaging services, VoIP, and email, plus a bit more.

BerryPopup

If you're a BlackBerry user who likes Outlook's Auto Preview feature, then you'll love Bellshare's BerryPopup ($6.95; www.bellshare.com). This app allows you to preview incoming emails. You can also open, reply, forward, mark as read, and delete messages directly from the popup window. BerryPopup's customization options are extensive; you can change the order of messages, schedule an auto-dismiss of the popup, disable during backlight mode, personalize fonts, and more.

Emoze

Aside from having the most aesthetically pleasing Web site of the lot, Emoze (free; www.emoze.com) delivers in terms of security, syncing capabilities, and mobile device support. The Emoze Consumer Edition supports both your work accounts and social networking accounts; to allay privacy concerns, Emoze enables compressed and encrypted transmission that help protect against data loss or infiltration.

The Basic version features single account configuration for emailing, saving drafts, and opening attachments (attachments as large as 100KB are permitted). For a minimal fee, Emoze Pro offers syncing for Outlook, Gmail, Hotmail, Facebook messaging, a personal ISP account, and OWA. And, each account has an individual inbox. Emoze works with almost any mobile device.

Fring

Designed for expanding your online community to your mobile device, Fring (free; www.fring.com) combines all of your communication and social networking tools so you can create a single social profile. The application supports Facebook, Google Talk & Mail, ICQ, Last.fm, MSN Messenger, SIP, Skype, Twitter, and Yahoo!. In addition, Fring collects your online contact information into one fringFriends buddy list, lets you make reasonably priced international calls, and instantly connects you to familiar Wi-Fi hotspots.

Good For You

At Good (www.good.com), you will find email, exchange

The four Twitter tabs in I Tweet! for Android offer customized control of your tweets and followers.

access, data portal, and social networking. Focusing specifically on Good Mobile Email, you're able to sync multiple email accounts and share data at your own convenience. Good Mobile Email supports Gmail, Yahoo! Mail, MSN/Hotmail, and Microsoft Exchange, and they each get their own mailbox.

The Good For You (prices vary) connection feature lets you schedule the days or hours your mailed is delivered, so you don't feel like you have to constantly check and reply to every message in your inbox. It works with Java-capable mobile phones and those running Symbian S60 or Windows Mobile. Because Good Mobile Email is integrated with the Good Mobile Portal, backing up your mobile data is safe and convenient.

I Tweet!

Since Twitter has undeniably staked its claim on the Web, mobile software developers have obviously been working to design and streamline a Twitter platform that's ideal for any tweeter. Multiple Facets' I Tweet! (free; www.multiplefacets.com) is one such app. Currently available for the Android platform only, I Tweet! lets you view your personal tweets and messages, find out who's following you, and check your profile. Finding another tweeter is a matter of a few screen taps.

The interface includes four Twitter Tabs: Tweets, Messages, Users, and Favorites. You're also able to view a tweet timeline—both posts and replies. Use I Tweet! to start a keyword, username, or (when you're in another state or country) a location-based search query; it's essentially a type of mobile Twitter search engine.

reQall

If you're looking for a service that will jog your virtual memory, then reQall (www.reqall.com) is the perfect mobile assistant. The software combines email, texting, and IM (instant messaging) to create an organized task-mastering application. Available for BlackBerry, iPhone, and standard mobile phones, reQall produces reminders via email, IM, or tet.

The Standard version (free) includes the Memory Jogger feature, which provides personal reminders. Although this feature is not part of the reQall Pro package ($2.99 per month or $24.99 per year), Pro users get the Pro Memory Jogger for "Here and Now" tasks, a GPS-coordinated to-do list, and organized memory groups.

With reQall's advanced Memory Jogger feature, you won't lose track of your current task list.

Vlingo

Vlingo (free; www.vlingo.com) is a "press & command," voice-based application that lets you literally tell your phone what to do. Instead of tapping your messages or navigating your phone by pressing buttons, you can simply speak to it during the prompted instructional recording time and see if your smartphone is truly smart. You can rest assured it is with Vlingo.

Vlingo can create a text, compile email, call a contact, search the Internet, and even update your status on social networking sites. For instance, you can say, "Status update I'm leaving for the airport," and Vlingo will upload this command to phone, giving you the option to post it to Facebook or Twitter. Vlingo is in full release for BlackBerry and iPhone; it's still in beta for Nokia (www.vlingo.com/betaen) and Windows Mobile (www.vlingo.com/windows).

WhitePages Mobile

Regardless of the hundreds of contacts stored in your iPhone or Android-based smartphone, it would be nice to find contact info for almost anyone throughout the nation. WhitePages Mobile (free; www.whitepages.com/tools) gives users access to 180 million U.S. adults in a single application.

WhitePages for iPhone features four search options: People Search, Business Search, Reverse Phone, and Recent Results. If your phone supports GPS capabilities, it will be able to auto-detect your location and let you access maps and create directions based on your search queries. Updating your iPhone contacts is simple because WhitePages syncs the most recent contact info to your phone's records. WhitePages Caller ID for Android lets you instantly view the caller's name as well as the address and city where the phone is registered.

Yeigo

Yeigo's Web site (www.yeigo.com) asserts that Yeigo is a "free software application for your mobile phone that lets you call and message anyone, anywhere." That's close to true: You can use Yeigo to make free calls, send instant messages, and send text messages internally for "90% less." You'll also save up to 80% on calls to anyone who doesn't use Yeigo services.

You can chat to AIM, GoogleTalk, ICQ, Jabber, MSN, and Yahoo!, all for free unless you would like to use any of them abroad. One entertaining feature is the ability to send your offline friends a "Holler" to tell them you're logged on and they should be, too. Users with Symbian or Windows Mobile phones can register for a free account by signing up at Yeigo.com, texting **yeigo** to 32010, or by replying to an invitation to join.

by Joanna Safford

Security Software & Utilities

Don't Leave Home Without Them

Not long ago, a mobile phone was simply a mobile phone. About the smartest thing it could do was to maintain an address book. Today's smartphones hold the digital essence of our lives, from contacts to credit card information to PINs and passwords. Keeping all of that data safe and secure is not an easy task.

Data Encryption

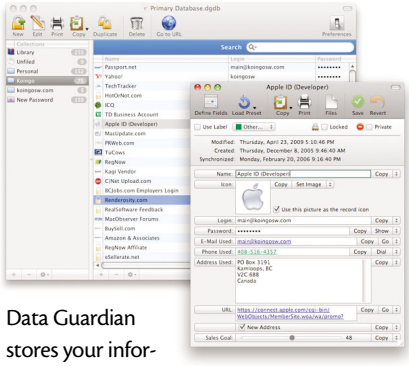
One of the first lines of defense is to encrypt the data on your smartphone so only you can access it. Data encryption can be applied to specific data, such as lists of accounts and passwords, or to entire areas of a smartphone.

Data Guardian

Data Guardian from Koingo Software ($19.95; www.koingosw.com) is a database that can store just about any type of information, from address books to passwords to shopping lists, on an iPhone or Palm OS device. But Data Guardian isn't just any database; it's a database that stores data in 448-bit BlowFish encryption. That's the highest level of encryption found in a smartphone application. Assuming you don't use something as obvious as your pet's name as a password, the encryption will be almost impossible to defeat.

SecuBox

Aiko Solutions' SecuBox ($39.95; www.aikosolutions.com) uses 256-bit data encryption to protect your information on Windows Mobile devices. But unlike comparable apps, SecuBox also creates a secure data safe by carving out a portion of your smartphone's file system for itself. Any file you store in the SecuBox is encrypted on the fly. One of the best uses of SecuBox is for encrypting your removable memory card. Should it ever become lost or stolen, its data content will be unreadable without the SecuBox software and your password keys.



Data Guardian stores your information in a database protected by 448-bit BlowFish encryption, the highest level of encryption found in a smartphone app.

SplashID

This password manager protects stored data, including usernames, passwords, credit cards, registration codes, and PINs, with a 256-bit BlowFish-based encryption system. SplashData's SplashID ($9.95 to $19.95; www.splashdata.com) lets you automatically log in to your accounts by clicking a link. Besides making it easier to access your accounts, this system also thwarts keyboard loggers, preventing them from intercepting your personal data.

SplashID also offers a desktop client for Macs and PCs that syncs easily with your smartphone. You can use it to enter account information, as well as to maintain a backup of the data on your smartphone. SplashID is available for smartphones running Android, BlackBerry, iPhone, Palm, Symbian, and Windows Mobile operating systems.

Remote Smartphone Locking & Recovery

Many security suites include a remote locking feature and the ability to find a missing phone, but these dedicated applications offer a few extra features that are worth a second look.

mSafe

More than just a basic remote lock and wipe application, mSafe from MotionApps ($19.99; www.motionapps.com) offers some very handy trigger events that can automatically lock down your Palm OS or Windows Mobile smartphone. For example, you can configure mSafe to auto lock when the power is turned off, when the phone loses network coverage, or when the memory card or SIM is removed. In addition to automatic triggers, you can also use mSafe to manually send remote lock and wipe commands.

RobLock

RobLock from Vapssky ($9.95; www.vapssky.com) is a theft protection and recovery system for smartphones running BlackBerry, Symbian, and Windows Mobile OSes. It not

Privacy Suite Mobile includes encryption, permanent file deletion, password generating, and remote locking tools.

only allows you to remotely lock your smartphone but also (if your phone supports GPS) finds the phone and lets you view its location on a map. It can be a relief to learn your phone isn't in a thief's hands, but on the kitchen counter where you left it when you left the house this morning. Should the phone indeed be stolen, you can use RobLock to remotely wipe the contents of any memory cards, including contacts, email, photos, and other data. You can also upload your contact list from the phone before you wipe its contents.

Warden Security

Taking a slightly different tack than simply remotely locking a smartphone, Corsoft's Warden Security ($24.95; www.lockmymobile.com) can automatically lock a Palm OS or Windows Mobile phone if it becomes separated from a paired Bluetooth device, such as headphones or a Bluetooth watch. Your phone is protected before you even realize it's missing.

To help recover your phone, you can configure Warden to display an emergency number for the finder to call; you can even include a text caption, such as "Reward if found." Another interesting feature is the option to configure the phone's lock screen to display emergency medical information, which is useful as long as you automatically lock the screen when you're not using the phone.

Security Suites

As their desktop equivalents do, so do mobile security suites attempt to subdue viruses and other malware; they also address issues unique to smartphones.

F-Secure Mobile Security

F-Secure Mobile Security ($39.95 for one year; www.f-secure.com) is a suite of antivirus and anti-malware scanners for Symbian and Windows Mobile phones that automatically checks every file you download, save, copy, or modify in any way. Even better, Mobile Security does it with speed and a small footprint that make it virtually unnoticeable in day-to-day use. F-Secure Mobile Security also offers antitheft features, including remote lock and wipe. It will notify you if the SIM is changed and send you the new phone number associated with the SIM.

Kaspersky Mobile Security

Like F-Secure Mobile Security, Kaspersky Mobile Security ($29.95 for one year; www.kaspersky.com) is a suite of tools designed to protect your Symbian or Windows Mobile smartphone from theft and malware. It also has an antispam system to block annoying SMS messages.

Using both real-time and scheduled scanning engines, Kaspersky Mobile Security scans every file you download and files already on your phone.

If your smartphone is lost or stolen, you can use Kaspersky Mobile Security to remotely lock and wipe the phone, as well as view its location if the phone is GPS-enabled. If the SIM card is replaced, Mobile Security will send you the new phone number. Last but not least, a data encryption capability lets you set up a "safe" folder. Any data you store in the safe folder is automatically encrypted.

SMobile Security Shield

The antivirus and anti-malware scanner in SMobile Security Shield (price varies; www.smobilesystems.com) monitors files you download and files already on your smartphone. Its robust antispam system can block voice and SMS messages. You can create blacklists to block certain numbers or create whitelists from your existing contacts. Security Shield also offers antitheft protection, with remote lock and wipe capabilities, remote location for GPS-enabled phones, and remote data backup.

If your phone is lost or stolen, you can use SMobile Security Shield to sync its data with your desktop or laptop computer before you lock or wipe it remotely.

SMobile Security Shield is available in a Standard Edition ($34.99 per year) and a Professional Edition ($39.99 per year) for Symbian and Windows Mobile phones. Security Shield for BlackBerry ($29.99) is now available, too.

Privacy Suite Mobile

Privacy is as important as security. Privacy Suite Mobile from Steganos ($49.95; www.steganos.com) is a data protection suite for Windows Mobile phones that places all of your data, including emails and contacts, in an encrypted, password-protected vault. If you no longer need data, the Shredder Mobile utility can permanently delete files, so data recovery software can't recover them.

The Password Manager Mobile utility stores all of your passwords in an encrypted file. When it's time to create new passwords, you can use the password generator to create strong passwords that are difficult to break. You can also configure Privacy Suite Mobile to lock your smartphone whenever a connection to a paired Bluetooth device is broken.

by Tom Nelson and Mary O'Connor

Software For Traveling

Use Your Phone To Travel Smart

Whether you travel by plane, train, or automobile, your smartphone can become your most valuable mobile companion. When your days are full of meetings and your nights are full of commuting, it's helpful to know that there are apps that can make your travels a bit more convenient or less stressful. Test out some of the unique applications we've found for you to find out what you've been missing.

XChange

Converting exchange rates when you're traveling internationally is usually not a stress-relieving task. Bulbera's XChange ($7.95; available through Handango, www.handango.com) does the math for you with its real-time currency converter. Including information for 60 major currencies, XChange automatically updates highly used currencies such as USD, EUR, GBP, and JPY.

Designed for the BlackBerry and producing fast and accurate results, XChange lets you type letters that match the compatible currencies. You can type up to 20 digits, and XChange will convert the amounts on its convenient-to-use interface. The custom rate feature creates a defined rate when you do not have two official currencies for conversion.

e-Mobile GPS Tracker

GPS services are invaluable to any business traveler who wants to be as efficient as possible when navigating urban terrain. The e-Mobile GPS Tracker from e-Mobile Software ($24.95; www.pocketmedialive.com), for Pocket PC and Windows Mobile, has all the appropriate features to maintain the correct route; track your real-time position; and personalize your GPS experience with notes, photos, and more.

Import and export options connect you to Google Earth, so you can save favorite trips or important locations and share them with colleagues (or friends and family). My Location identifies your geo-location via automatic GPS detection and connection. You can also use e-Mobile GPS Tracker to view photos of your POIs.

Personal Assistant

Pageonce created Personal Assistant (free; $6.99 for premium edition; www.pageonce.com) for the BlackBerry and iPhone platforms. The app lets you simultaneously log on to multiple accounts on your smartphone. In other words, you can check your bank transactions, flight information, monthly cellular plan, upcoming bills, and other sites such as Netflix and eBay, all via a single app.

Personal Assistant delivers timely alerts to prepare you for pending bills and warns you of suspicious or fraudulent activity in your accounts. The well-designed interface provides your transaction information (amount, merchant, balances, etc.) on a single screen. Pageonce uses multiple security layers to protect your data and is insured by an A+-rated insurance provider.

My-Cast

Many times it seems as though you have to plan your itinerary around the type of weather you may encounter. What better way to keep track of severe (or not so severe) weather events than with an intuitive mobile application that works on a wide variety of platforms and phones?

Personal Assistant from Pageonce lets you manage your online financial accounts.

Garmin's My-Cast ($3.99 per month; www.digitalcyclone.com) uses animated NEXRAD radar to display a comprehensive forecast; you can view the hourly weather reports or the seven-day predictions. To keep you posted, My-Cast Weather flashes watches, warnings, and other severe weather advisories from the National Weather Service. Weather maps include current forecast icons, wind direction, dew points, temperatures, and wind speed. My-Cast also shows the UV index and lightning tracker.

Fizz Traveller

With Fizz Software's Fizz Traveller ($5.99; www.fizzsoftware.com), you get five services for your iPhone (or iPod touch) in one package: local information, organizer for favorite cities, Fizz Weather, itinerary planner, and currency converter. As you check the time and weather forecast in preferred cities on the Today screen, you can orchestrate meetings in times zones other than yours.

The itinerary planner incorporates trip notes and other travel events (Flight, Hotels, Care Hire, Cruises & Meetings, etc.) through which Fizz Traveller lets you make hotel reservations or email your travel schedule in advance. The conversions feature has more than currency rates: Use it to convert ladies' skirts sizes, men's shoes, and other practical measurements.

AutoFile Plus

Compiling travel expense reports is a time-consuming task—one that you may be soon keen on when you're back in the office and trying to catch up on the accumulated work. With WakefieldSoft's AutoFile Plus ($29.99; www.wakefieldsoft.com), you can take care of your travel records while you're on the road.

It can be tricky tracking multiple vehicles, fuel records, trip miles, and other expenses, but AutoFile offers predesigned pages that organize all this information as you enter it. AutoFile stores your insurance information and accident reports. The Plus version includes software for your PC and printable report summaries. AutoFile works with Palm OS and Windows Mobile.

Trippo

Cellictica's Trippo (prices vary; www.cellictica.com) is software for Java-based phones (such as those running Nokia S60) that translates text from one language to another wherever you roam. Translating to and from English, Spanish, Italian, and French, Trippo lets you type any phrase or sentence, click the Translate button, and then read the translation. Click Speak, and Trippo will play the translated text as it should be pronounced. It functions as a mobile language-learning suite, as well; you can listen to the translation repeatedly and pick up on new languages as you travel.

Location Notes

Designed specifically for Blackberry smartphones, Tworoads Software's Location Notes ($2.99; www.tworoads.net) merges GPS features with mobile notes, so you can file away the exact coordinates of a location and its associated notes. Once saved, you can export notes to Blackberry memos, email a single note, or send multiple notes as attachments. When you want to view your locations on Google Maps, you'll update your GPS with the latest coordinates you've saved.

PalmaryClock

When you're regularly changing time zones, setting your alarm becomes somewhat of an inconvenience. PalmarySoft's PalmaryClock ($7.95; www.palmarysoft.com) for Palm OS gives you the option to customize your alarms with timers and other settings. For the aesthetically minded smartphone user, Palmary offers multiple skins and backgrounds to make things more interesting. Interestingly, you can open other applications or the timer through an alarm—these alarms are controllable from the Home screen. Other features include analog-digital clocks; calendars; 10 stopwatches; world maps; and support for MP3, OGG, WAV, and WMA alarm tone formats.

by Joanna Safford

Can't live without your hourly weather updates? Use Garmin's My-Cast to get timely weather updates and severe storm alerts.

Fizz Traveller, a 5-in-1 travel application, features Time, Weather, Conversions, Meeting Planner, and Itinerary.

Fun Extras

Apps That Make Your Smartphone Fun, Too

Sure, your smartphone is a huge boon to your productivity. But for as many apps that are available for getting things done and getting where you need to be, there are even more out there for entertainment and personal improvement. From games to learning tools to mobile software that help you in your non-business life, you can find plenty to whet your appetite for fun.

Fitness Builder 1.3

Fitness Builder 1.3 from PumpOne ($19.99; www.pumpone.com) is an iPhone app equipped with more than 400 workouts that you can use on just about any mobile device with a color screen. It has 23 fitness goals for you to work toward with the ability to create your own workouts.

The app is designed to keep you on track without having to keep detailed logs—Fitness Builder 1.3 does it for you. Workouts are designed for wherever you may find yourself, whether it's at home, the gym, the hotel, and so on. Other features include cardio tracking, fitness timers, fitness calculators, and weight tracking.

Pac-Man

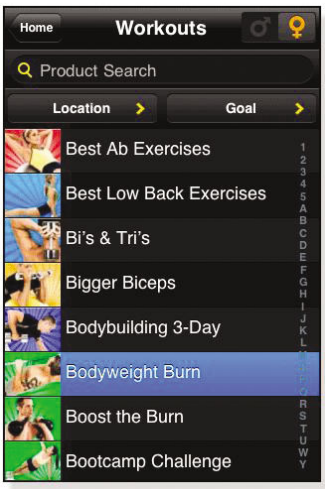
Yep, you can download Namco's Pac-Man ($6.99; www.namcogames.com), one of the original favorite games of arcade-haunters everywhere, onto your phone. An astonishing number of handsets are supported, so you should be able to get cracking on the game no matter what device you have.

Features include 256 levels, the vintage "coffee break" animations between levels, and the ability to pause and resume the Pac action. Go ahead, start wasting time with this little gem.

Sign 4 Me

If you ever thought about learning sign language in your spare time, Sign 4 Me from Vcom3D ($9.99; www.vcom3d.com) is an iPhone app that can help you take advantage of those minutes spent waiting for a table at a restaurant or at the taxi stand.

Sign 4 Me's most obvious feature is the 3D avatar that demonstrates signs while the corresponding text appears at the bottom of the screen, so you can see the character performing the sign from any angle. You can type in whole sentences and see them translated; the app knows 11,500 words. Each sentence or word you look up will be saved for your convenience.



Fitness Builder 1.3 has plenty of preset workouts for you to keep yourself on track.

Piano Sharp

Available exclusively on the iPhone and iPod touch, Piano Sharp from Rambax ($1.99; www.rambax.com) is—for lack of a better term—a really cool app. You can play the virtual piano keys to make your own tunes, and you can even record multiple tracks (up to three), edit velocity and tempo, loop tracks, and export them as MIDI files.

You can also import MIDI files and play them back on your smartphone. And, for the final touch, you can scroll left or right on the

You can create your very own Sim and manage your virtual life, including furnishing your virtual home, interact with other Sims, and even get a virtual job.

For your inner musician, Piano Sharp lets you import, record, listen to, and export MIDI files.

virtual piano keyboard just by tilting the phone one way or the other.

WeatherBug

If you want to know what the weather's like, stick your head out the window (as the saying goes); or, check out WeatherBug (free; weather.weatherbug.com) on your Android-powered smartphone.

WeatherBug features live neighborhood weather aggregated from thousands of weather stations across the country, so you should be able to get an updated forecast no matter where you are. The app will use GPS data to identify your location. Features include live camera feeds, weather radar you can zoom in to see, and seven-day forecasts.

Pocket Auctions For eBay

Bonfire Media has created a handy application called Pocket Auctions for eBay ($9.99; www.bonfiremedia.com), which is essentially a tool that lets you browse and manage your eBay activities from your Alltel, AT&T Wireless, Sprint, or Verizon Wireless smartphone.

You can view pictures and descriptions of auction items, compare prices, keep track of your My eBay account, bid on items, and receive automatic alerts on items you're watching. Now, you can eBay wherever you are.

IM+ For Skype

Skype is a popular video chat application, and SHAPE Services has developed the IM+ For Skype ($29.95; www.shapeservices.com) app for BlackBerry that lets you text and send and receive calls with other Skype users around the world.

It's not video chat, but it nevertheless lets you stay in touch with friends and family who are using Skype at any time, and it's more cost-effective and convenient to chat over Skype than to send a regular SMS (Short Message Service) text.

IM+ For Skype gives you the ability to chat over IM with other Skype users around the world.

Audible For BlackBerry

Many people know of Audible.com, a site where you can download audio recordings of books, podcasts, magazines, and more. Now, you can listen to recordings from your Audible account on your BlackBerry with the aptly named Audible for BlackBerry (free; download.audible.com/blackberry).

Any online purchases you make at Audible.com are processed through their secure servers and can be listened to on your BlackBerry right away. The application includes one free download (Thomas Friedman's novel "Hot, Flat, and Crowded") as well as access to Audible's Free channel.

The Sims 2

Simply put, The Sims 2 ($9.99; thesims2.ea.com/mobile) is the mobile version of the hugely popular virtual life game. This version works on just about any smartphone, so you can be certain you'll be able to play it on your device.

The Sims 2 lets you create your very own Sim and manage your virtual life, including furnishing your virtual home, interact with other Sims, and even get a virtual job. You can also buy, sell, and trade goods and even "fall in love." All of this from the convenience of your smartphone.

With Home 2, you can completely renovate the appearance of your Windows Mobile phone and get more intuitive and easy access to various settings and programs.

Home 2

Would you like to change the appearance of your Windows Mobile phone? Home 2 from Pointui (free; $19.95 for Pro version; www.pointui.com) is a home page tool that gives you better access to various core tools and applets within your phone with just a few finger swipes.

Items you can get to more easily by using Home 2 include your call history, contacts, task manager, programs and settings, and help tools. Various themes are available to suit your taste, as well.

by Seth Colaner

New For Your Mobile Phone

The Latest Updates & Services

The BlackBerry Storm from Verizon received many improvements with its recent firmware upgrade.

The Palm Pre recently received a couple of updates to improve its operating system.

Software and service updates can make your mobile phone more efficient and you more productive, but keeping up-to-date with those upgrades can be time-consuming. Fortunately, we have all the latest information on service and software updates that apply to mobile phones and carriers, along with the latest news and features from all the mobile carriers and manufacturers.

BlackBerry Updates, Patches & New Features

Verizon Wireless has released a firmware update for the BlackBerry Storm that boosts the operating system to version 4.7.0.148. This update fixes the issue users were having with implementing a full QWERTY keyboard in portrait mode. The firmware also addresses problems with the camera and bugs that were causing the phone to freeze or project a blank display. The update is available through the BlackBerry Web site (na.blackberry.com/eng/update).

BlackBerry maker Research In Motion also released a security patch that minimizes the phone's vulnerability to hackers. Without the patch, cyber criminals could send malware via Adobe PDF email attachments to users, potentially exposing sensitive data.

In other BlackBerry news, Agito Networks (www.agitonetworks.com) announced it is providing VoIP (Voice over IP) through Wi-Fi and unified communications to the popular line of handsets with the RoamAnywhere Mobility Router. This device currently offers VoIP via Wi-Fi to Windows Mobile 6 Pro and Symbian platforms.

Remote Wipe, available through MobileMe, will protect your sensitive information if a thief were to steal your Apple iPhone.

Palm Pre Gets An Early Boost

Palm has released two updates recently for the Palm Pre platform. The first update, version 1.0.2, makes adjustments to the phone's clock. With the update, you can use your phone as an alarm clock, create and save multiple alarms and even customize sounds for specific alarms, and switch between analog and digital time display. The update also lets you experience quicker camera speeds, and the phones will have fewer problems related to their emails, calendars, and other applications.

Version 1.0.3, which was released a few weeks after version 1.0.2, adds support for Google Calendar and Contacts synchronization, and it lets users create a weekday alarm on the weekends. Additionally, the update enhances email performance in areas where wireless coverage is irregular, and it adds support for non-SSL EAS (Exchange ActiveSync) mail servers.

Google Adds Features For Android

Google Maps is now easier to use when you're on the move with your Android phone, thanks to multiple enhancements Google recently added. Google Maps for Android introduces support for speech queries. Also, when you conduct a search, Google Maps can display specifics such as hours, prices, ratings, and reviews with the business listings. The program includes walking and public-transit directions. And the updated Latitude program includes social networking features. To obtain the update, download the latest Google Maps application from the Android Market.

In addition to the new Maps features, Google has made improvements to Gmail for both Android and iPhone users. The enhancements are designed to make it easier for users to get through large quantities of email. Users can choose from a drop-down list of contacts after typing the first few letters of a name, which is similar to what you'll find if you've used Web-based Gmail on your desktop. Android users who have phones with physical keyboards (such as the T-Mobile G1) will be able to utilize the same keyboard shortcuts users on a desktop computer enjoy. This can also help you cut down on the amount of time you spend in your email inbox.

Apple Releases Security Patches, Find My iPhone

Apple's iPhone and iPod touch received 45 software patches recently to tackle uncommon security vulnerabilities. The patches were released in conjunction with the iPhone 3.0 operating system launch. There have not been reports of malicious software aimed at the iPhone in the two years since the phone was made available, but some analysts have identified vulnerabilities in the past.

Apple also introduced Find My iPhone and remote data-wipe services for MobileMe (a Web-based file sharing program). Find My iPhone helps users locate their missing phones by providing a map. Find My iPhone also makes it possible to send a message or alert to your phone, which causes your phone to sound an alarm even if the phone is set to silent. If you determine that your iPhone is stolen or otherwise unrecoverable, MobileMe's data-wiping service, Remote Wipe, will ensure no one can access files or data from your phone. Just make sure that your iPhone stays charged, as these services won't work on an iPhone with a dead battery.

AT&T & iPhone Wi-Fi Support

iPhone users will soon be able to switch almost seamlessly between AT&T's 3G network and public Wi-Fi hotspots, thanks to the inclusion of auto-authentication via the iPhone's new 3.0 OS. Some users had complained about the login process, which some users have described as tedious. The iPhone 3.0 OS finds hotspots and logs in automatically. The upgrade to receive the new service is free for iPhone and iPhone 3G users, and Apple has included the upgrade in the new iPhone 3G S.

T-Mobile Delivers 3G To Dash

T-Mobile updated the HTC Dash recently, which means users can now take advantage of the carrier's mobile broadband network. The Dash 3G is T-Mobile's first Windows Mobile phone with support for 3G, and the new handset can also receive emails through Microsoft Exchange Server. In addition to the preloaded Office Mobile suite, the Dash has a wireless chip for locating Wi-Fi hotspots and a GPS chip for local search and LBS (location-based services) support. The phone also features a microSD card slot and Bluetooth 2.0.

New To Nokia Handsets

Nokia recently released an Adobe Flash Lite update for the 5800 XpressMusic, which is designed to enhance Web browsing, includes support for Flash 9, adds MP3 streaming capabilities, and provides better video support in addition to a host of other new features and improvements. We should note that the update is available through the new S60 platform's App Update programs. Additionally, the Nokia N97, N86 8MP, and E52 have all received N-Gage compatibility. N-Gage is a program for Nokia phones that lets you download and play games.

WiMAX Delivered To 6 Million Rural Dwellers

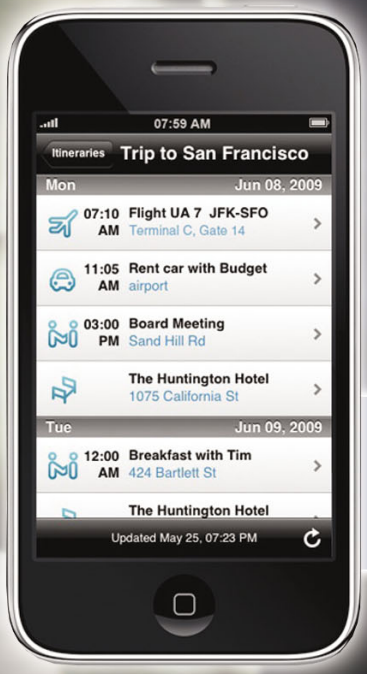
Open Range Communications and Alvarion signed a contract to deliver $100 million in products and services—including WiMAX—to more than 500 rural communities throughout 17 states. The service, which will be implemented over a span of five years, will reach approximately 6 million people who are currently unable to access high-speed Internet services. WiMAX, sometimes referred to as 4G, will be able to reach speeds of 1.5Mbps down and 512Kbps up.

by Tessa Warner Breneman

You can now download and play games through N-Gage on the Nokia N86 8MP.

New & Updated Mobile Software

Get More Done With Your Mobile Device



WorldMate For iPhone lets you view your travel and business itinerary from a single screen.

Looking to improve the functionality of your mobile phone? We've compiled the most recently released applications and program updates for smartphones to help business travelers maximize the potential of their mobile devices.

New Titles For iPhone

First designed for the Palm OS in 2000, WorldMate has been helping business travelers with their itineraries for quite some time. **WorldMate For iPhone** (free; www.worldmate.com/iphone) automatically builds your itinerary, based on confirmation emails you forward to trips@worldmate.com, and synchronizes it with your iPhone. You can also search flight schedules for more than 800 airlines to find a flight for your destination. The application's Travel Dashboard also displays nearby world clock times, world weather, and a currency converter. With a WorldMate Gold subscription, you can also have flight updates automatically sent to your iPhone.

PhatWare released three programs for the iPhone, and all three are add-ons for PhatWare's **WritePad** (free; www.phatware.com), a text editor with built-in handwriting recognition and editing for text input. **WritePad Affairs** ($4.99) is an organizer that lets you sort duties, such as jobs or contracts, using a variety of fields, such as Due, Completion, Status, or Total Work Hours. **WritePad Events** ($4.99) lets you create appointments, meetings, and phone call records, and you can import or export events to a file compatible with Microsoft Outlook Journal. **WritePad Notes** ($4.99) is a utility that lets you create, edit, and view notes on your iPhone. You can filter and categorize notes by characters or specific words.

TomTom For iPhone (price TBA; www.tomtom.com) includes TomTom's GPS application with the latest maps and a car docking station. The docking station, which features speakers to provide loud turn-by-turn directions, also serves as a charger for your iPhone 3G. You can also free your hands and make calls when your phone is seated in the dock. For your viewing convenience, the docking station offers a suction cup mount you can attach to your car's windshield.

Want touch navigation; cut, copy, and paste functionality; and predictive text entry for Microsoft Word documents on your iPhone? **Documents To Go** ($9.99; www.dataviz.com) gives you all these features in addition to other advanced editing features that include bulleted and numbered lists; bold, italics, and underline text; tables; and word count. DataViz also includes a desktop application so you can transfer files to your Windows or Mac computer using a Wi-Fi connection. If a newer version is available, Documents To Go will copy the latest version onto your PC or iPhone.

Agendus For iPhone ($7.99; www.iambic.com) from Iambic is a program designed to enhance the built-in iPhone Contacts App by integrating it with the Agendus task management application. In particular, Agendus gives you capabilities to set up task lists, filter and group tasks based on various criteria, link tasks and contacts, and configure recurring tasks. Agendus includes a number of other features to control your workflow and manage your schedule.

New Titles For Windows Mobile

With the ability to calculate fuel consumption and checklists for your vehicle to-do list, MASPware's **AutoManager For PocketPC** ($28; www.maspware.com) lets you categorize and track expenses and maintenance for your vehicle. There's a travel book for business and private travels, and you can import and export the data for processing in Microsoft Excel. AutoManager For PocketPC can also track CO2 emission values and deliver graphical and tabular evaluations.

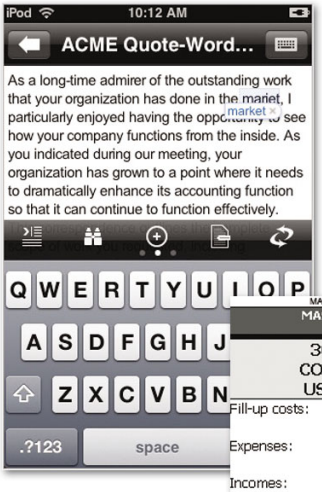
Windows Media Player Mobile isn't the most user-friendly media player with touch-screen phones. Enter **Microfi Nitrogen** (free; www.code.google.com/p/microfi-nitrogen) and its large, easy-to-use buttons. Browsing your playlists is as simple as drawing circles on the app's skin. Nitrogen also includes a file browser, shuffle and report modes, and a 10-band equalizer with preset support for eight audio settings. Currently, Nitrogen offers full MP3/OGG playback support.

Pocket Dictionary 2.5 is a freeware application (www.free-soft.ro) that includes more than 20 dictionaries and a total of more than 2.5 million words. Pocket Dictionary 2.5 supports phones running on Windows Mobile 2003 or newer. There are a variety of English to other language options, including English to French, English to German, English to Italian, English to Spanish, and English Oxford.

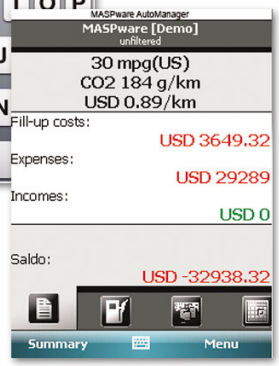
New Titles For BlackBerry

When you really need to get work done, your laptop is often more efficient than your smartphone, but if you're stuck in an area without Wi-Fi or a wired connection, you may be forced to use your BlackBerry. With **TetherBerry** ($49.95; www.tetherberry.com), your PC can use your BlackBerry as a modem, and you won't have to pay extra fees for using your phone's data plan. TetherBerry indicates that it can provide download speeds as high as 1,800Kbps, comparable to 3G network speeds. To use TetherBerry, you just need to download software to your BlackBerry and PC.

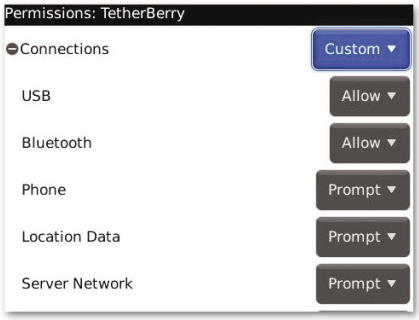
Ilium Software announced that **eWallet For BlackBerry** ($19.95; www.iliumsoft.com) now supports the BlackBerry Storm. eWallet can store your usernames, passwords, PIN, bank account numbers, health info, and membership information. For your security, all of the data is kept behind 256-bit AES FIPS (government-level) encryption, and any transferred data is copied using the HTTPS protocol, which is the same method used by your bank and credit card companies. You can sync your eWallet with multiple devices or PCs to make certain your info is current on all your hardware.



Documents To Go For iPhone provides you with the ability to use a variety of special formatting tools in a Microsoft Word-compatible document.



Turn your Windows Mobile phone into a vehicle performance evaluator with MASPware's AutoManager For PocketPC.



With TetherBerry, you can access the Web on your laptop, anywhere, by connecting your BlackBerry phone.

New Title For Android

3banana Notes (free; 3banana.com) stays wirelessly synchronized with the 3banana online service to let you or the friends you invite view and edit your notes. You can also use the camera and barcode scanner on your Android phone to link the content directly to the 3banana Note's application. When you're online, you can also track Web pages, presentations, and videos that you want to include into a note. You can structure the 3banana Notes however you see fit, as all notes are labeled inline without any required data entry fields.

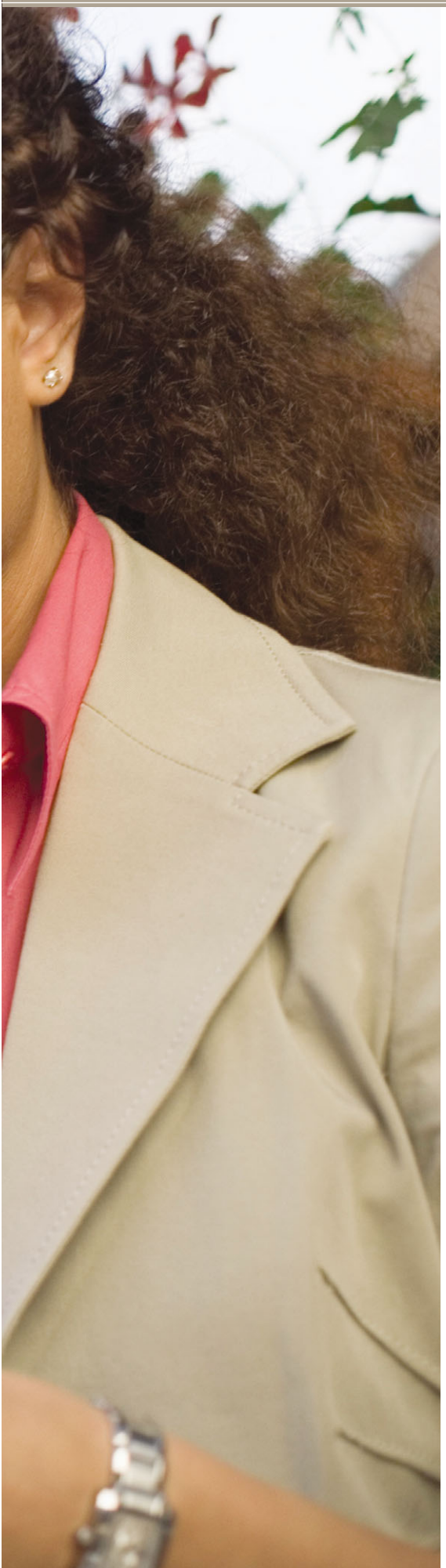
by Nathan Lake

Sanus Mobile

If you need help mounting your HDTV, visit Sanus Systems mobile Web site (m.sanus.com). You can access Sanus' MountFinder (mount-to-TV compatibility list) and HeightFinder (installation assistance) utilities. The HeightFinder tool can tell you the exact location for drilling holes when mounting the TV at a desired height.

Smartphone Tips

Advice To Keep You Connected & On The Move

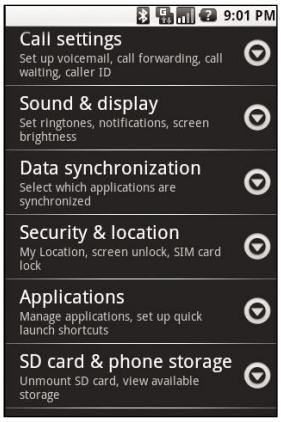


Smartphone users, welcome to tips central. Here you'll find a multitude of smartphone hints, shortcuts, workarounds, and more for six of the most popular smartphone operating systems available. Read on to learn the ins and outs of your device.

Android

Factory Reset

There are a variety of reasons you might want to perform a factory reset on your T-Mobile G1, including when you're sending the device in for repair, returning it, selling it, or just looking for a clean slate. To factory reset your G1, start by powering off the unit. Press and hold the Home key and End key until you see a triangle with an exclamation point and the G1 icon, and then press and hold the ALT key and W key on the keypad simultaneously. Now, remove your memory cards, and suddenly your phone is bare as the day it was born.



Turning your G1 into a portable hard drive is easier than you might think.

Use Your Phone As A Portable Hard Drive

The folks at SanDisk have created microSD cards that hold an amazing 32GB of data, which gives you ample room to store an extensive music and video collection and anything else digital you want to transport from point A to point B. To use your G1 as a portable hard drive, start by enabling mass storage mode. Plug your G1 into your PC via a USB cable; press the Menu button; and then select Settings, SD Card & Phone Storage, and Use For USB Storage. At this point, you should be able to access a Windows Explorer folder on your PC. Now, just drag and drop anything and everything you need. The next time you plug your G1 into a PC, you should get an Auto Play prompt that lets you load or unload your phone's memory card. If not, just access My Computer in Windows XP (Computer in Vista) to find your G1 as a mass storage device.

Voice Dialing

Voice dialing is a great way to quickly place a call without having to navigate the menu and contacts list. It can also help you keep your eyes on the road should you need to make a call while driving. To use voice dialing on your G1, press and hold the Send key, and then speak a name from your contacts list. Your G1 will recognize the name and dial the number for you.

Typing Shortcuts

As an avid smartphone user, you're no doubt constantly looking for faster ways to type and send messages. To insert special characters, flip open your keypad and press ALT-Spacebar. To remove an entire line of text, press ALT-DEL. Not that you would purposefully type messages in all caps, but if you do need to emphasize a word, press the Shift key twice. To place the cursor at the end or beginning of a line of text, press the ALT key while scrolling the Trackball to the right or left, as desired. To insert a tab space, press ALT-Q. To highlight text to move it, or cut/copy, press the Shift key and roll the Trackball over the desired text.

Set Songs As Ringtones

Why would you buy a ringtone when you can use a song you already paid for? To set a song on your G1 as a ringtone, open the Application tab (press and drag upward), select Music and Songs, and then press and hold your finger over the song you want to make a ringtone. When the context menu appears, select Use As Phone Ringtone. That's it. And for the sake of our sanity, we ask that you choose a song that you wouldn't be embarrassed to let your mother hear.

BlackBerry

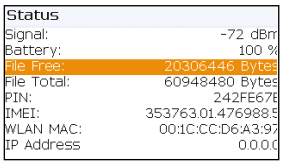
A Quick Fix

When your BlackBerry gets unruly, hangs, disobeys your commands and is generally

being an ornery little smartphone, try the basic battery pull before you resort to harsher, more potentially destructive measures. Pulling out the battery is known to resolve application errors, theme issues, data failures, and more. With the device still powered on, remove your BlackBerry's back cover to reveal the battery. Remove the battery, wait approximately 30 seconds before you reinsert it, and then reboot your BlackBerry. If this doesn't do the trick, try a soft reset, which requires you to hold down the ALT-Right Shift-DEL keys for roughly two seconds.

Plug Memory Leaks

If your call logs and messages begin disappearing for no reason, your BlackBerry might have begun systematically deleting older content in an effort to free up enough internal memory to remain functioning. The first step is to check your device's remaining free memory. In most cases, you would access Settings from the Home screen and then select Options and Status. Alternately, you can press and hold ALT-Shift-H. View the File Free status, measured in bytes. Mentally add commas to determine how many million bytes are free—this is equal to the number of megabytes available. You can safely assume that any more than 12MB free is sufficient and that your BlackBerry wouldn't be gobbling up old data.



If your BlackBerry is mysteriously gobbling up call logs and messages, it might be running low on memory.

If you need to clear a small amount of data, try clearing the Browser cache. From the Home screen, scroll to the Browser application, press the trackball to launch the browser, press the Menu key, select Options, and then select Cache Operations. From this menu, you can clear History, Content Cache, Pushed Content, and Cookie Cache using individual Clear buttons. All content is cleared when no more buttons are available to select.

To free up additional space, remove any applications you no longer use. From the Home screen, select Settings, Options, Advanced Options, and Applications and then highlight the application you want to uninstall. Press the Menu key and select Delete to remove the app.

Another way to free memory is to delete the BlackBerry Sample Video that comes already loaded on your device. Select Settings from the Home screen and choose Options, Advanced Options, and Applications. Highlight the BlackBerry Sample Video, press the Menu key, and then select Delete.

iPhone

Force Quit

For those rare occasions when your iPhone is running slow or an app hangs and won't let you quit or access other apps, the Force Quit option is a handy way to make a quick exit. To Force Quit, you want to hold the Home button for approximately 6 seconds. This closes all background processes and currently running applications. Keep in mind: Performing a Force Quit in Mobile Safari clears the cached pages, but when you relaunch the browser, your tabs will reload just as you left them. If you are using the newer iPhone 3G, you need to press and hold the Sleep/Wake button until the Slide To Power Off screen appears, and then press and hold the Home button for 6 seconds.

Recovery Mode

If your iPhone ever freezes and becomes unresponsive, even after rebooting and connecting the USB cable to your computer, then you might need to put it into Recovery Mode. This should work as long as you are running the latest version of iTunes. First, plug your USB cable into your computer (don't plug in your iPhone just yet), and then hold the Power button down until you see the Slide To Power Off message. Turn your phone off and press and hold the Home button while connecting the USB cable to your iPhone. Continue holding the Home button until you see the Apple logo followed by the Connect To iTunes message. A message should appear that says iTunes has detected an iPhone in Recovery Mode.

Restore Your iPhone

Beware that if you do place your phone in Recovery Mode, you'll need to reload it with data from a backup or restore it from scratch. Note that performing a restore will completely wipe the device of songs, videos, contacts, photos, calendar information, and any other data and files you added—your restored iPhone will be factory-fresh. Before performing a restore, make sure you're running the latest version of iTunes, and if not, install it before proceeding. Next, connect your iPhone to your Mac or PC and select it in iTunes. If your iPhone is frozen and iTunes fails to recognize the device at this point, press and hold the Home and Power buttons for roughly 10 seconds, and then release the Power button while still holding the Home button. At this point, your iPhone is in DFU (Device Firmware Upgrade) mode and iTunes should detect your iPhone. Next, select the Summary tab (in DFU mode, the Summary tab may be the only available tab), click Restore, and then follow the on-screen prompts.

Recovery Mode lets you fix a jammed iPhone.

Symbian

View & Edit Microsoft Office Documents

For most of us, the documents we work with on a day-to-day basis are in Microsoft Office or Office-compatible formats, such as Word (DOC), Excel (XLS), and PowerPoint (PPT). But as a Nokia user, you don't need a Windows Mobile device to get great Office document viewing and editing capabilities in the palm of your hand. Thanks to Quickoffice, you're just a few button taps away from your work. To launch Quickoffice, press the Menu button, select the Office folder, and click Quickoffice. Quickword, Quicksheet, and Quickpoint let you view and edit Word, Excel, and PowerPoint documents, respectively. Keep in mind that although Microsoft Office file types are viewable and editable, some advanced features are not available in Quickoffice.

Copy & Paste

The key commands to copy and paste text on your Nokia are identical to the commands used on your PC. Press and hold the Function key, which looks like an up arrow, on your

From here, restoring your iPhone is just a click away.

Nokia E71; then scroll up, down, right, or left to highlight the word, phrase, or text you want to copy. Next, release the Function key.

Some Nokias have dedicated CTRL keys, but our E71 does not, so we used the Shift key to access the CTRL function of the CTRL/CHR key, as follows. Press the Shift key and the CTRL/CHR key (you should see CTRL in the upper-right corner of the screen), and then press C to copy the text to the clipboard. Next, position the cursor to where you want the text copied and press the Shift key again, followed by the CTRL/CHR key and then the V key. These commands work in the Notes application, text messages, Web forms, and in Quickoffice documents.

Turn Bluetooth & Infrared Off Or On

You can quickly enable and disable your Nokia's Bluetooth or infrared radios without scrolling through menus. To turn on the Bluetooth radio, press and hold the Function key and CTRL. To turn on the infrared radio, press and hold the Function key and CHR. Perform the same commands a second time to disable the radios.

View Running Apps

Multitasking is a good feature to have on your smartphone, but without a taskbar, you might have trouble remembering which applications are currently taxing your battery. To quickly scan through your running applications via the application-switching window, press and hold the Menu key. Scroll down or up to highlight an application and then press the scroll key to switch to that app.

webOS

Yahoo! IM & Facebook Chat

They don't call it the webOS for nothing. Palm's latest creation can handle many of the Web applications you already use, directly from your Pre, including a couple popular instant messaging applications: Yahoo! Instant Messenger and Facebook Chat. To use Yahoo!'s chat client, just launch your browser and navigate to Yahoo!'s mobile page (m.yahoo.com) and sign in. To take advantage of Facebook chat, just launch the Pre's browser and navigate to facebook .com, scroll down to the bottom-right corner of the interface, and click the Chat bar.

Quickoffice is the key to Microsoft Office document viewing and editing on your Nokia.

Data Transfer Assistant

Attention loyal Palm users: If you're looking for a way to get your old Palm device data onto your new webOS-based Pre, look to the DTA (Data Transfer Assistant). The DTA lets you perform a one-time, one-way transfer of Calendar, Contacts, Tasks, and Memos from your computer to your phone. To get started, visit www.palm.com/us/support/downloads/pre/migration/moveontophone.html and click the appropriate Continue link for where your data resides, such as Palm Desktop for Windows or Mac, iCal & Address Book on a Mac, or Outlook. Next, download the DTA utility and update the Palm Desktop to version 6.2 if necessary. Before running the DTA utility, make sure you sync your old Palm device to your PC or Mac one last time. Then run the DTA utility and select the destination for your transferred data, such as Microsoft Exchange or Google Calendar and Contacts. Once complete, you'll be able to retrieve this data using your Palm Pre.

Windows Mobile

Soft Reset

Most Windows Mobile phones feature a soft reset button you can press with the tip of a stylus or straightened paperclip. If you can't find one, then it's either tucked behind the battery cover or your phone doesn't have one.

Hard Reset

The hard reset is a bit of a last resort, but when you need to perform one, it's usually because your device is otherwise unusable. Hard resets are best for resolving unfixable network issues, messaging problems, error codes, broken applications, PC communication errors, and Bluetooth failures. Before you try this, keep in mind that a hard reset typically wipes the device's system memory; deletes any third-party programs, themes, and files; and erases any files you created or copied to the device. If you hope to recover any data from your phone or don't have any valid backups available for your valuable data, avoid performing a hard reset, if possible.

The trick about hard resets on the Windows Mobile platform is that almost every device requires a different key combination for performing one. To find the appropriate key combo for performing a hard reset on your device, simply visit www.hardreset.eu/index_en .html, make sure you click the In English link, find your phone manufacturer on the left side of the page, and then click the link for your phone model.

by Andrew Leibman

Digital Downtime

Notes On The Latest In Digital Music & Video

Music, photos, videos, movies, TV shows, podcasts, FM radio, audio books, calendars, contacts, file browsers, touchscreens, Wi-Fi, Bluetooth, and on and on. Yeah, today's portable audio and video players give you pretty much the whole enchilada and a side of nachos to boot. For the latest software, hardware, accessories, services, content, and tips concerning portable audio and video players, belly up and dig in.

iPhone Charging Ventures Into The Wild

There's something to be said for a multitasking device that can give your other devices a pick-me-up when they need it. WildCharge's (www.wildcharge.com) WildCharger Pad and new WildCharge Skins for Apple iPhone and iPod touch models are such devices. Simply wrap a formfitting, protective Skin around an iPhone; place the iPhone on the Pad; and a contact module embedded in the back of the Skin "makes electrical connection" with the surface of the WildCharger Pad to charge the iPhone wirelessly. Further, the Pad can charge multiple devices at once. The Skin is compatible with all iPhone models and sells alone ($34.99) or bundles with the Pad ($79.99). The Pad, meanwhile, runs $49.99 sold alone. Skins are also available for the BlackBerry Curve and Pearl for $34.99 each. WildCharge also recently announced a Universal Adapter ($79.99) that also works with the Pad and is compatible with more than 150 phones when used with interchangeable tips. A Universal Adapter Bundle that ships with a mini-USB tip, for example, runs $79.99.

Tired of wires getting in your way? WildCharge's WildCharger Pad and WildCharge Skin technology (top) can wirelessly charge multiple iPods and iPhones simultaneously, while Scosche's Recoil (bottom) neatly tucks away its retractable power cord if not in use.

If you're in need of an in-car charger for an iPod or iPhone but have an aversion to cable clutter, you can go wireless—sort of—with Scosche's (www.scosche.com) Recoil ($29.99). Using a retractable cord and magnetically locking dock connector, the Recoil's cord does exactly what its name suggests after you unplug the adapter from a vehicle's 12V power outlet.

iLuv iPod Dock Shakes, Rattles & Rolls You Awake

Bit of a heavy sleeper are you? Have your zombie-like sleep patterns caused you to sleep through a meeting or two? No worries with iLuv's new iMM153 Desktop Alarm Clock with Bed Shaker for iPod ($59.99; www.i-luv.com). Beyond its two separate alarms and built-in speakers, the iMM153 includes an integrated hockey puck-sized "bed shaker" designed for placement under a pillow or on a mattress "to wake up the heaviest of sleepers." If that's not enough of a selling point, the iMM153 also includes an FM radio with 10 station presets and digital tuning technology that's geared to improve radio signal clarity. Other features include an LCD with dimmer; 3.5mm auxiliary jack; and seven ways to wake your bones. Available in black, blue, white, and pink, the iMM153 should be available as you read this.

iLuv's iMM153 is designed to "shake and wake" even the heaviest sleepers via its bed shaker pod.

Altec Lansing Goes Pro; Cy-Fi Goes Wireless

As longtime audio gear maker Altec Lansing puts it, "High listening volumes not only distort sound, they're not healthy." To that end, the company's new BackBeat Pro earbuds ($99.95; www.alteclansing.com) aim to prevent damage to wearers' inner ears while simultaneously piping top-notch audio in through the use of SnugFit neoprene, dual-flange ear tips. The result is a sound-isolating seal in the ear canals with the tips blocking ambient noise so listeners can turn down the volume without sacrificing audio quality.

Altec Lansing claims the Pro earbuds' armature speakers are "professionally tuned for musician-grade sound," thus outputting "true high-definition, ultra-low distortion" audio that rivals studio reference speakers. Beyond the flange ear tips, the earbuds ship with a carrying case and small, medium, and large ear tips.

Elsewhere on Altec Lansing's audio front are the diminutive but stylistic new expressionist Plus speakers ($99.95). An integrated auxiliary jack allows for connecting MP3 and DVD players as well as notebooks and PCs, while a built-in power button doubles as a volume controller. The black, cone-shaped, 33W three-piece set comes with two adjustable 2-inch speakers (each with a 4W, 50mm driver) and 28W down-firing 5.25-inch subwoofer.

For a speaker that touts a bit more portability prowess than the expressionist Plus, the somewhat-pricey but wireless and water- and shock-resistant Cy-Fi (www.mycyfi.com) comes in iPod ($159) and Bluetooth ($149) versions. The mountable speaker weighs just 4 ounces, making it suitable for attaching to a bicycle for home-based workouts or packing in a suitcase for on-the-road use. Compatible with all iPods but the shuffle, the Cy-Fi's integrated A2DP support provides 30 feet of wireless audio from Bluetooth-packing smartphones and MP3 players. Further, the speaker functions as a speakerphone that lets you place calls and change iPod track, volume, and playlist settings without using your hands. The iPod version's rechargeable battery offers six hours of rated life, while the Bluetooth version offers roughly 5.5 hours of rated battery life.

Interesting iPhone Apps

Among the more interesting apps to recently hit the ever-increasing list of iPhone apps is venerable bookseller Barnes & Noble's free BookStore App (www.barnesandnoble.com/iphone). Beyond searching and shopping for books, DVDs, and music, BookStore offers directions to a local store; displays upcoming events; recommends books; and provides video clips and author interviews. Elsewhere, a free DukeMobile app not only gives prospective Dukies the lowdown on the university, it packs an Images feature containing 32,000-plus historical images from Duke University Libraries Digital Collections (library.duke.edu/digitalcollections).

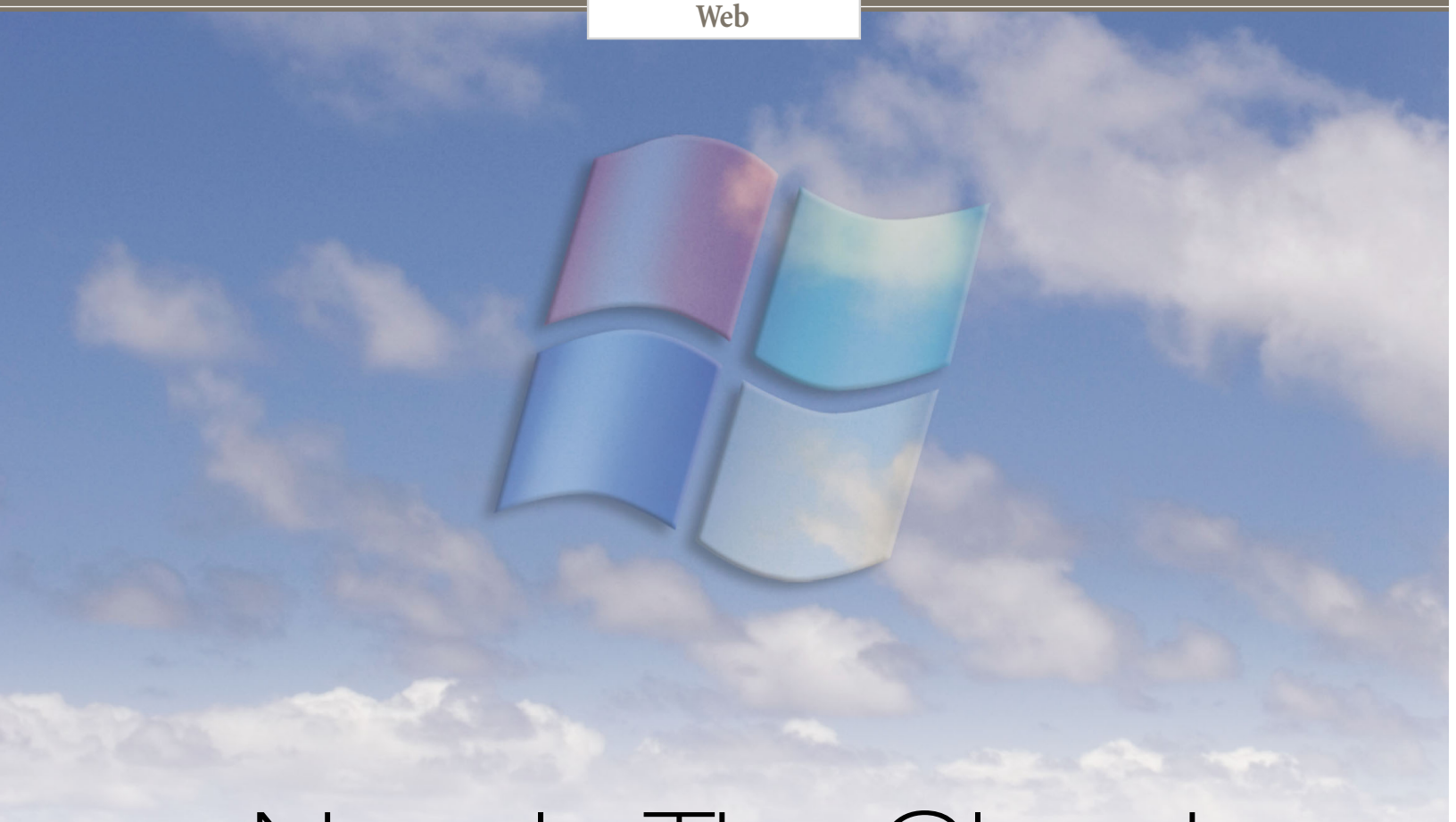
Another recent app is Dunkin' Donuts' free Dunkin' Run (www.dunkinrun.com), which lets lovers of all things Dunkin' organize and place group orders. After a runner starts an order and invites others to join via email, mobile phone, or iPhone app, Dunkin' Donuts compiles the requests and waits for the runner to pick it up. All that's left to do is "enjoy the deliciousness" and bask in "the hero worship."

Among recent apps for the iPhone are releases from Sirius XM, Barnes & Noble, Duke University, and Dunkin' Donuts. Now, do you take cream and sugar?

Finally, an app that has gotten mucho attention, but not all of it good, is Sirius XM's free Premium Online iPhone app. Although garnering roughly 1 million downloads in just weeks after its June release and providing Premium Sirius Internet Radio or Premium XM Radio Online subscribers 120 satellite channels, the app has been heavily criticized by users for not including Howard Stern channels and NFL, MLB, and NASCAR live feeds. The app does, however, let users buy songs from iTunes or tag favorites for later purchase.

by Blaine Flamig

Altec Lansing's new BackBeat Pro earbuds and expressionist Plus speakers offer wired office and mobile audio output, while the mountable Cy-Fi speaker sports wireless AD2P support.



New In The Cloud

Windows Looks Skyward

You may have noticed them or even used them: SkyDrive, Office Live Workspace, Windows Live Sync, and Live Mesh. They're all cloud services designed with features for online storage, file sharing, syncing, or productivity. Most of these have more than one feature, and thus, they overlap quite a bit in terms of functionality. Some are in beta, some are out of beta, and some started out as one thing and experienced a name change along the way.

What do they all have in common? They're all Microsoft products.

So what gives? Why all the overlap? Mostly, this somewhat confusing pile of programs is the result of a paradigm shift over at Microsoft, led by Chief Software Architect Ray Ozzie. Bill Gates essentially handed the creative reigns to Ozzie on his way out, although the two differ in their vision for developing products and services.

While Gates was a desktop-and-hardware man, Ozzie apparently has his eyes set upward on cloud computing. Make no mistake, Microsoft is working hard to capitalize on the cloud market, presumably hoping to win our hearts and minds with a product or suite of products so spectacular, so inimitably iconic, that we can do nothing but adopt it with open arms, as we did with Microsoft Office so many years ago.

So far, however, that Thing is mostly just a jambalaya of related but strangely disconnected (and under-featured) cloud applications. But in a way, that's what Ozzie has been after all along. His restructuring of some things over at Microsoft includes assigning smaller groups to various projects and letting them work mostly independently of one another, as opposed to having every group work on different aspects of the same large product. Ostensibly, he hopes that this will lead to greater and more nimble innovation.

A mind-numbing by-product of this fractioned style of product development is that we have several products with many similar features from the same company that were developed by groups that apparently weren't communicating a lot with one another.

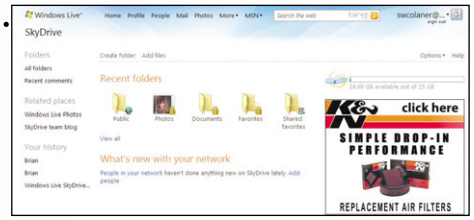
This is not to gripe at Microsoft; each of the aforementioned cloud products is intriguing on its own, so it's not as if the innovation aspect of things has failed. It's just that it's all very confusing when taken together.

Think of it this way: When any product is in the beta testing phase, users outside the company get to put that product through the paces, contribute ideas, discover bugs or flaws, and so on. Although some of the Microsoft cloud products are still in beta while others aren't any longer, you could think of the lot of them as one big beta project.

So, let's cut Microsoft a little slack for the moment and parse out what each of these products really does, how you can use them now, and what might happen in the future. Hopefully, these creative ideas will become one solid, extraordinarily useful and powerful product in the near future.

▼ Windows Live SkyDrive

SkyDrive (skydrive.live.com), which formerly went by the name Windows Live Folders, is simply an online storage space that offers users 25GB of capacity for free. It seems at this point to be predominantly aimed at more "fun" activities, such as photo sharing and social networking, as opposed to productivity related capabilities. You can also easily share files and folders with certain people, with members of your network, or publicly. SkyDrive appears to be a work in progress in that more features are on the way, but for the time being it's most definitely a useful way to back up a lot of data online for free.



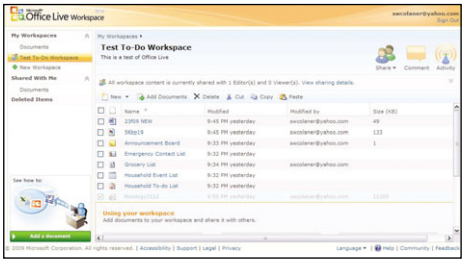
Windows SkyDrive offers 25GB of free online storage space.

▼ Office Live Workspace

Although it's still in beta, Windows Office Live Workspace (workspace.office.live.com) is an online area where you can create and share files. Technically, you can upload files of various types, but Office Live Workspace is designed with Microsoft Office documents in mind—currently, Word, Excel, and PowerPoint.

Sharing capabilities are central to Office Live Workspace. You can create a workspace, add documents, and share them with up to 100 people. You get 5GB of storage capacity, which is sufficient considering that this is a workspace, not a storage space or backup service. Individual files can be up to 25MB in size.

At some point, you'll be able to work with Office documents within a Web browser; currently, the best you can do is download a file, edit it on your own computer, and save it back to your Office Live Workspace.

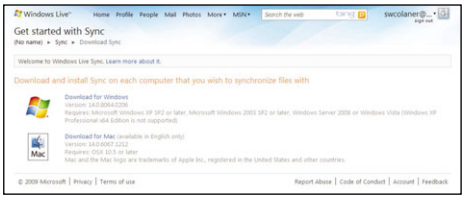


Still in beta, Office Live Workspace is an online service designed to let users review, edit, and share Microsoft Office documents.

▼ Windows Live Sync

Formerly known as FolderShare, Windows Live Sync (sync.live.com) is a free tool that lets you synchronize folders between computers. It requires the use of a client on each synchronized computer; there are clients for both Windows PCs and Macs.

In order for your folders to sync with another computer, that machine must be powered on and connected to the Internet. You can't manipulate files via the Live Sync Web site, which is a bit of a turn off. This feature *does* exist in both Windows SkyDrive and Windows Live Mesh, however, so if you're hoping to use Live Sync to replace, for example, a flash drive when porting files to and from work and home, consider one of the other services instead.



Windows Live Sync's purpose is simple: to sync folders across computers.

▼ Live Mesh

Of all the Microsoft services in this group, Live Mesh (www.mesh.com) seems to be the most complete in and of itself. You can add files and folders, retrieve them, and share them with others by using the desktop client or the Web interface.

Live Mesh's client is formatted like any Windows Explorer folder tree, which is convenient for manipulating files on your computer. The Web interface, which is dubbed Live Desktop, actually looks something like a Desktop environment and gives you 5GB of online storage.

You can also sync files and folders with Live Mesh. This service is still in beta, so time will tell what other features the development team adds. Meanwhile, one can't help but speculate if at some point Live Sync, SkyDrive, and Office Live will be subsumed into or integrated with Live Mesh.

Live Mesh is the latest cloud service from Microsoft and offers 5GB of online storage, a Web and desktop client, and syncing capabilities.

Speculation

There are other Microsoft cloud services in the works, such as the recently announced Windows Azure (a cloud services operating system designed with application developers in mind), but Microsoft's Mesh, SkyDrive, Sync, and Workspace are aimed squarely at end users.

In time, the wheat will presumably separate from the chaff, the masses will have spoken, and Microsoft will meld all of these cool services into one terrific and unified package. Then we'll alternately swoon over it and criticize it, like we do most everything else Microsoft develops. One thing is certain, though—Microsoft is in the cloud game, and it's playing for keeps.

by Seth Colaner

Best Of The Mobile Web

Get Your Financial & Technology News On The Move

Business trips are usually not synonymous with having a lot of downtime, so when you need to get information from the mobile Web, you need it fast. To complicate matters, some Web sites are optimized for mobile viewing, while others are not. To help you find what you need in mobile form, we've compiled a list of several mobile Web sites that can come to your aide when you're on the move.

Business & Financial Updates On The Move

It's important for you to stay on top of the current business and financial industry news, and there are a handful of mobile sites that offer just that. In addition to the current headlines, many of these sites also give up-to-date stock market information so you can go into every business meeting fully aware of all financial situations that might affect you and your business.

Financial Times (m.ft.com). The UK's Financial Times mobile Web site, which was recently redesigned to provide a better mobile experience, offers U.S. and international business and financial news along with its Lex column, which offers financial and business commentary. For professionals who need to keep tabs on world markets, the Financial Times reports market trends and features a graph that tracks how markets, such as the Nikkei, Dow, and Hang Seng are faring. Additionally, the mobile Financial Times site lets you read the Financial Times Alphaville Blog, which provides commentary on topics such as hedge funds, private equity, and investment banking. There is also an Arts and Leisure section on the site for less serious topics, including high-end food, real estate, art, and culture.

The Financial Times is a site based out of the UK that covers global financial and business news.

Bloomberg (m.bloomberg.com). Financial media company Bloomberg recently pared down its popular Web site for the mobile Web. There, professionals can obtain financial and business news, market data, and stock information. Bloomberg's mobile site offers a section that lets you keep track of your personal portfolio and find quotes from companies around the globe. In addition to its mobile site, you can download the

Bloomberg mobile application for BlackBerry, iPhone, and Windows Mobile smartphones. The application lets you view charts, find legal information, and receive alerts.

The Street Mobile (m.thestreet.com). As one of the most popular financial news Web sites, The Street has recently taken its show on

Bloomberg's mobile site covers Wall Street and the U.S. and global economies.

the road with The Street Mobile. To access this mobile site, however, you will need to download the application (for BlackBerry and iPhone only). After the application downloads, you will have access to the latest market data, business and financial news, and commentary, along with analyst upgrades and downgrades. You can also access video clips and blog entries from "Mad Money" host Jim Cramer. The Street Mobile application is a great way to quickly catch up on what the stock market is doing while you're on the road.

MarketWatch (www.marketwatch.com). MarketWatch's mobile site has all the up-to-date headlines and information you will need, including a comprehensive list of financial topics, such as the bond and commodities markets, currencies, earnings, the economy, mutual funds, personal finance, the SEC, and more. MarketWatch offers information, advice, analysis, and commentary regarding the aforementioned topics and more. In addition to news and analysis, MarketWatch lets you stay on top of your portfolio and see how the market is affecting your investments, something not many mobile sites offer.

Streetread (www.streetread.com/m). Streetread accomplishes two goals. First, it lets you look up stock market symbols and data and receive a comprehensive market summary. Second, it offers a host of headlines coming off of Wall Street from other popular news sources, such as BusinessWeek, CNNMoney, CNBC.com, and Forbes. It's a quick, efficient way to get all the Wall Street news and information you need.

Streetread aggregates news stories from other business and financial news sources and brings them to a single mobile Web site.

Technology News To Go

As a tech-savvy business traveler, it's likely you have a natural curiosity for the latest devices, concepts, and technology news. Several mobile Web sites offer current headlines, commentary, and insight to cutting-edge tools and technologies that come out of the technology industry. Next time you're waiting for your flight or standing in line at the security gate, you can glance through these sites to keep on top of what's coming out of Silicon Valley and other technology hot spots.

Boy Genius Report (www.boygeniusreport.com). The Boy Genius Report has been delivering the latest news and headlines from the mobile tech industry since 2006, and now you can access this blog from your Web-enabled phone. BGR focuses on smartphone platforms, mobile carriers, cell phone technologies,

The Boy Genius Report is a blog that reports on mobile technology news, including mobile devices and new mobile technologies.

manufacturers, and related topics, with some early, hands-on looks at new and upcoming devices. Here you can find out what handsets and devices are headed for your mobile carrier and which platforms are receiving service updates. You'll also find progress reports on wireless technologies such as WiMAX and LTE (Long Term Evolution).

SmartMobs (smartmobs.mobify.me). Mobile technology and social networking have both changed modern culture as we know it, and combining the two has only accelerated changes in modern communication. SmartMobs is a blog, which is now available through the mobile Web, dedicated to examining how social networking and mobile communication have set the stage for the next social revolution. SmartMobs author Howard Rheingold based this blog on his book, "Smart Mobs," which studies the impact of communication and computing merging to form both beneficial and destructive outcomes. For mobile professionals who communicate through mobile technology daily, this blog is sure to peak your interest.

TechFlash (www.techflash.com/mobile). Not all technology news comes out of Silicon Valley. TechFlash is a tech news site based out of Seattle that offers its articles and information via the mobile Web. TechFlash isn't limited to or focused on any particular aspect of the technology industry, such as mobile technology,

TechFlash, which is based out of Seattle, offers technology news from business and technology reporters.

software, or hardware, but offers a combination of current headlines from those and many other topics. TechFlash contributors include media professionals who have covered technology and business beats throughout their careers, so they bring added insights to some news items you might wish to know more about.

Techdirt Lite (www.techdirt.com). The mobile Web version of Techdirt, Techdirt Lite is a blog that focuses on changes in government policies, technology, and legal issues that, according to Techdirt, impact organizations' ability to create and grow. You'll find information about Internet TV, mobile communication technologies, and a wide variety of other stories on Techdirt Lite. Posts on Techdirt Lite are quick reads that you can browse from inside a taxi or while you're lounging around in your hotel room.

by Tessa Warner Breneman

by Blaine Flamig

Travel News

Radisson & IHG Renovate & Rebrand

In addition to adding the 740-room Radisson Our Lucaya Resort, Grand Bahama Island to the Radisson Hotels & Resorts brand in June, Radisson opened the Radisson Hotel Baton Rouge July 1. The 132-room hotel underwent an $8.5 million renovation before being rebranded as a Radisson property and offers 5,000 square feet of meeting space to handle 440 people. The hotel also features a different theme for each floor, including Executive, Acapulco Ambassador, and Grand Cabo Presidential. The InterContinental Hotels Group, meanwhile, recently opened the 270-room Crowne Plaza Boston-Newton just minutes from Logan International Airport. After spending $10 million on interior renovations, the hotel now has 7,000 square feet of meeting space, including a 4,000 square-foot ballroom.

California Curbs The Calories

Even if you don't want to know the toll that Burger King Whopper you just devoured will have on your body, a law that went into effect in California July 1 requires Burger King and all other of roughly 120 chains with at least 20 restaurants to tell you. More than 17,000 restaurants are touched by the law, which requires sit-down and drive-through establishments to provide brochures detailing calories, salt, saturated fat, and carbohydrates standard menu items contain. By 2011, restaurants must post the details on menus or indoor menu boards.

Restaurant Industry Continues Downward Slide

For the 12th straight month in May, restaurant owners reported negative same-store sales, reports the National Restaurant Association in its recent Restaurant Performance Index, which tracks the U.S. restaurant industry's health and outlook. Restaurant operators also reported negative customer traffic for the 21st straight month, with 22% indicating an increase in customer traffic between May 2008 and May 2009 (compared to 23% in April 2009) and 59% reporting a decline between May 2008 and May 2009 (compared to 60% in April).

Cell Phone Apps Not Being Fully Utilized

A survey that Harris Interactive conducted of 2,212 adults for Sprint indicates that 56% of vacationers aren't using available travel-related apps on cell phones due to cost concerns, with 61% of women and 65% of young adults viewing related fees as a deterrent. Fifty-one percent of young adults (18 to 34) and 43% of older users (55+), meanwhile, report wanting access to GPS/navigation apps, restaurant guides (51%/41%), social media Web sites (34%/4%), and online/wireless games (19%/6%). Elsewhere, 77% of young adults are likely to check email while vacationing vs. 73% aged 35 to 44, 69% aged 45 to 54, and 61% aged 55 and older.

Hotel Rates To Stay Put For Years

In what is great news for consumers but a nightmare for hotel operators, Bloomberg.com recently reported that it could be until at least 2012 before some hotels can return room rates to 2008 levels. Average daily rates dropped 9.8% to $97.03 in May 2009 compared to 12 months prior, Bloomberg reports. Since Jan. 1, 2009, rates have sunk 8.5%. In 2008, the average U.S. daily room rate topped out at $106.69. Bloomberg quoted Mark Woodworth, PKF Hospitality Research president, as saying,

"There were rate declines in 2001 and 2002, but until this year that was the only other time that happened in this industry in some 20-plus years."

Incentient Hopes To Smarten Up Hotel Rooms

Incentient (www.incentient.com), which "designs and implements proprietary gateways" to enhance business-customer transaction experiences, has announced details of its new multilingual SmartTouch system for potential use in hotel rooms. Among other abilities, the patent-pending 20-inch, buttonless SmartTouch touchscreen system would let guests tap into such hotel services as room service, valet parking, restaurant reservations, housekeeping, and more, complete with real-time updates. Incentient indicates it's currently marketing the SmartTouch to hotels.

Marriott & Starwood To Create TelePresence

Marriott stated in June it will offer AT&T's TelePresence Solution beginning in October in 25 properties. Based on Cicso technology, TelePresence provides businesses space to meet virtually in real time via 65-inch HD monitors and audio. For businesses, the approach could potentially cut travel expenses significantly, as a Marriott TelePresence room will reportedly rent for $400 to $500. "We believe telepresence will create more business meetings because people can travel shorter distances and easily connect with colleagues and clients around the world," said Arne Sorenson, Marriott International president. Starwood Hotels and Resorts Worldwide announced a similar TelePresence plan for 10 hotels in 2009 via a partnership with Tata Communications.

TripAdvisor Users Like Portland, Blast Detroit

Forgive us Detroit natives, but a recent survey that TripAdvisor conducted of 3,400 users concerning U.S. cities ranked The Motor City as the ugliest, least healthy, and least favorite. Portland, meanwhile, was deemed the cleanest and most underrated, while New York was named the favorite and friendliest/most helpful but also the least friendliest/helpful. Most boring? Cleveland. Most romantic? Honolulu. Healthiest? Seattle. And while Las Vegas may be the most economical, it's apparently also the most overrated.

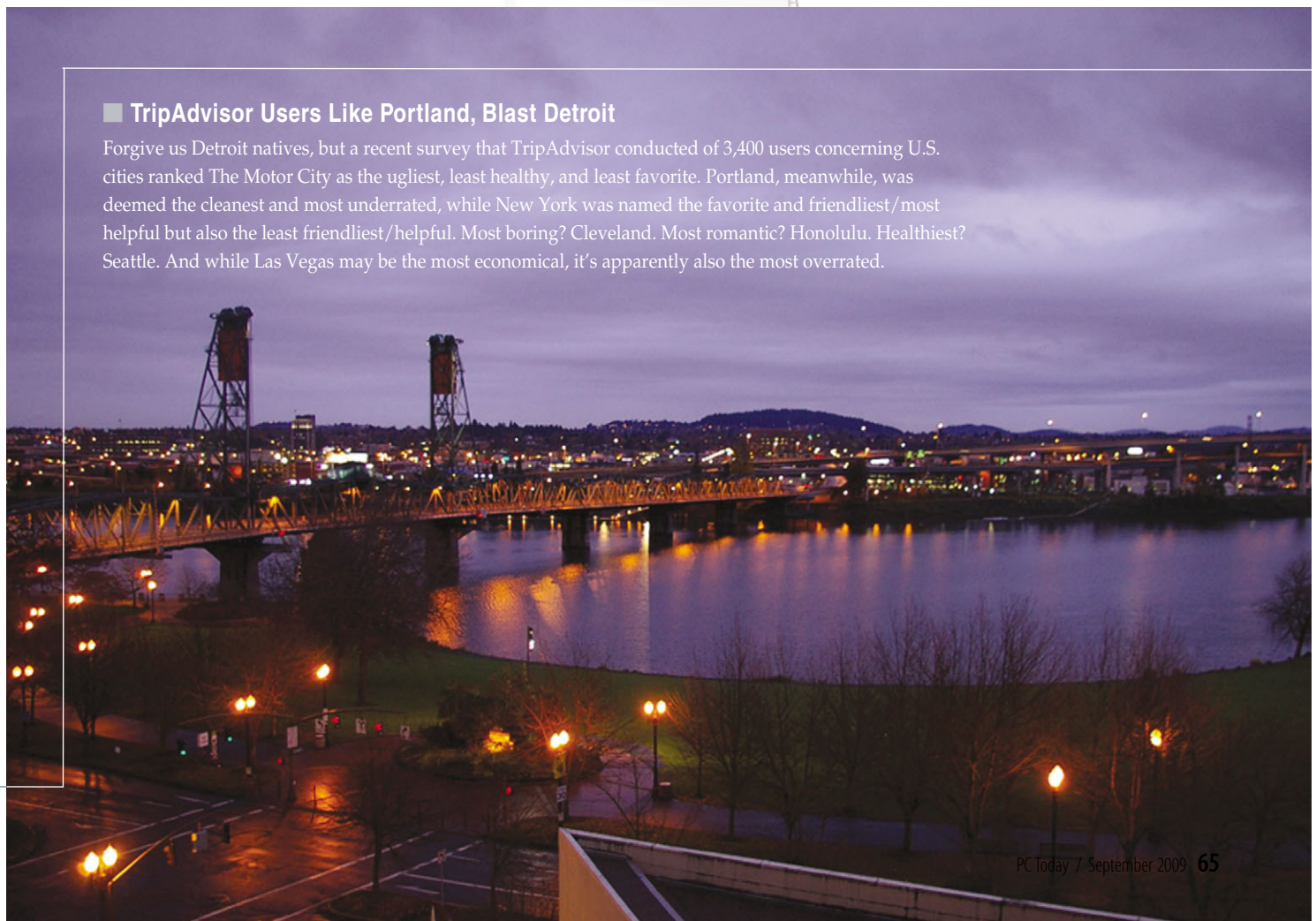


Photo Courtesy of Dave Krause

John Wayne Airport

Instant Guide To SNA

Change is underway at SNA, official airport code for John Wayne Airport in Orange County, Calif. The airport, which serves more than 9 million passengers annually, is now in the midst of construction projects that are scheduled to wrap up in 2011. A new parking facility is in the works in conjunction with the building of the new Terminal C, and renovations to Terminals A and B are set to begin next year. If it has been awhile since you've traveled through SNA, you'll also find a new South Coast News shop and a remodeled CNBC News Orange County shop in Terminal B. For more information than what you'll find here, visit the official SNA Web site at www.ocair.com. by Calvin Clinchard

Need to find airport info fast?

Visit www.pctoday.com and click the Airports link on the left under Services.

Airlines	Terminal A	Alaska Airlines, American Airlines, American Eagle, Continental Airlines, Delta/Northwest Air Lines, Delta Connection (Skywest), Virgin America
	Terminal B	Frontier Airlines, Mesa Airline, Northwest Airlines, Southwest Airlines, United Airlines, United Express, US Airways
Airline Lounges	American Airlines Admirals Club (www.aa.com /admiralsclub)	Thomas F. Riley Terminal, Mezzanine level inside security, near gate 8. Open Monday through Friday from 5:15 a.m. to 8 p.m., Saturday from 5:30 a.m. to 6 p.m., and Sunday from 6:30 a.m. to 8 p.m.
	United Airlines Red Carpet Club (www.united.com /redcarpetclub)	Thomas F. Riley Terminal, near the elevator across from gate 7. Open Monday through Friday from 5:30 a.m. to 7 p.m., Saturday from 5:30 a.m. to 2:30 p.m., and Sunday from 6:30 a.m. to 7 p.m.
Special Services	If your electronics are in need of a charge, you're in luck at SNA; power outlets are available in the seating areas at gates 2 through 14. There are two ATMs in the baggage claim area, one near gate 4, and another near gate 11. Curbside check-in is available, as are self check-in kiosks for many airlines.	
Dining	In addition to the Starbucks and McDonald's locations in both Terminals A and B, you'll find Gibson's Guitar Lounge in Terminal A, Creative Croissants and the Sports Page Pub in Terminal B, and the Brioche Doree Café & Bakery and Oasis Grill & Sky Lounge in the food court situated between the terminals. There is also a snack bar near the ticketing area.	
Flight Information	The SNA Web site doesn't have a mobile version, but if you have your computer and Web access, you can visit www.ocair.com, roll your cursor over Airlines, and click Flight Schedules. Follow the on-screen instructions to retrieve the latest arrival and departure information.	
Wi-Fi Internet	The American Airlines Admirals Club and United Airlines Red Carpet Club both offer complimentary wireless Internet access via their T-Mobile Hotspots.	
Phone Numbers	General Information	(949) 252-5200
	Lost And Found	(949) 252-5000

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Top Problems To Avoid

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Storage At A Premium 1
Cooling Climate Problems 4
Data Centers On The Move 6
Clean Up Your Act 8

Boosting Your Security Defenses

Is your enterprise protected from hackers, viruses, and other threats? Special security coverage begins on page 24.

TECH & TRENDS

- Deciding whether and how to pare down the number of data center facilities your company has can be a challenging process ..... page 1
- IT services are moving to the cloud, motivated in part by the need to cut costs. But IT departments will still need internal IT professionals ..... page 20
- Social software, which has been seen as a cost drain on productivity, is becoming a popular method for making employees more productive ..... page 26
- Almost 25 years and 11 versions after Microsoft Word's introduction, some question why we're still using essentially the same tool ..... page 34

NEWS

- During a February meeting with financial analysts, Microsoft CEO Steve Ballmer said Office 14's release "will not be this year" as many industry experts had (no, it's still) expected ..... page 2
- According to market research firm IDC, spending on IT cloud services will grow threefold by 2012, with spending climbing to $42 billion ..... page 2
- Yahoo! Chief Financial Officer Blake Jorgensen says the company is open to putting its Web search business up for sale or forming a partnership with another company ..... page 3
- EMC is being investigated for allegedly submitting false claims to the government and paying kickbacks to vendors in exchange for government contracts ..... page 3
- During the fourth quarter of 2008, about 23% of all hardware sold in the United States were smartphones, according to a recent report from NPD Group ..... page 3
- AT&T's Pacific Bell Telephone did not monopolize the DSL market, the Supreme Court ruled unanimously in late February, overturning a 2003 California court decision ..... page 3
- Testers experimenting with the Windows 7 beta have found that it may be possible to remove Internet Explorer from a computer running the operating system ..... page 7

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Storage At A Premium

Boost Performance & Stay On Budget In The Face Of Shrinking Storage Space

by Cornel Levy

• • •

TOUGH ECONOMIC times are prompting IT shops to scour their infrastructures for the most efficient ways to reduce costs, improve performance, and reduce risk. The management of managed data continues to grow even in a suppressed business environment, storage is rapidly becoming a priority area of focus.

In many cases, relatively small investments in storage can return significant savings. Before diving in, however, it's important to keep some challenges in mind.

Look Into Storage Resource Management To Keep Tabs On Data

Companies often pay little attention to what they're storing until they approach maximum usage and alarm bells start going off.

"Most organizations only know they have a problem with storage when users call in to report problems running their applications," says Andrew Reichman, senior analyst with Forrester Research. "In effect, they use the phone as their performance analytics, which makes it very difficult to manage. If your only form of measurement is a red warning light, that's not very granular."

Valdi Fiks, research director for storage technologies and strategies at Gartner, says reactive strategies are problematic. "Businesses don't know if the data is being used, if it's not being used, and how important it is to keep it. They don't have a clear picture of how long they use their data," says Fiks. "So they have lots of duplicate data."

Fiks cites a common example of an employee emailing a PowerPoint presentation to 1,000 staff members. "If the presentation is a megabyte in size, and it ends up being stored a thousand times, you've just lost a gigabyte straightaway on your email server," he says. "Companies need to spend more time understanding how people use storage on their desktops, on their servers, and within their applications."

To gain visibility into storage resources, SMBs should consider using SRM (storage resource management) tools. They don't necessarily drive a car without a speedometer and fuel gauge, so why would you run your storage environment without similar visibility? SRM tools give IT much more granular control over its storage investments.

"You can justify the cost of these tools pretty easily," says Fiks. "If you've got a badly utilized environment with disk

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Key Points

- Knowing what you're storing can make it easier to manage your existing storage resources and avoid post-crisis panic-buying
- Refresh your technology mix by considering increasingly capable storage systems you might otherwise have ignored
- An effective training and policy framework encourages storage-friendly behavior that limits abuse and maximizes utilization of existing resources.

Too Many Data Centers?

Decide Whether You Need To Consolidate

by William Van Winkle

• • •

COMPANIES GROW, mergers happen, times change. Whatever the cause, many enterprises eventually find themselves poring over a roster of data center locations and wonder just how many are actually needed—especially when the economy turns south. But deciding on whether and how to pare down the number of facilities can be a challenging process.

Figures First

First off, question the assumption. Should you consolidate? At the Gartner 27th Annual Data Center Conference, in the presentation "The Data Center Scenario: Planning for the Future," researchers noted, "As far as the number of data centers [goes], most organizations have too many, but some, especially mid-size organizations, have too few and put their business at risk as a result."

Knowing whether you need to expand or contract starts with looking at a collection of three key location costs: human resources, property, and any services feeding the data center. All three of these things cost money, and they are not independent. Once the sum of these three is determined, you'll have better odds of not consolidating to the most expensive site. Ideally, the goal is to eliminate expensive sites and consolidate to the least expensive locations, but

Knowing whether you need to expand or contract starts with looking at three key location costs: human resources, property, and services.

not before taking the local skill set into account. As Rob Enderle, principal analyst at the Enderle Group, points out, "Often, the cheapest site is the site where nobody wants to be."

Enderle advises enterprises to examine if sites that could potentially be closed might have certain geographic dependencies. For example, some projects have to remain in close proximity to the groups working on them. Such sites are better candidates for optimization rather than outright consolidation.

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Get The Right Sound

Home Speakers For Portable Media Players

Creative's TravelSound i85 for iPod nano ($99.99; www.creative.com) is an ultraportable speaker system. Barely bigger than an iPod nano, the TravelSound i85 uses a single speaker per channel and a rechargeable lithium battery that provides up to 15 hours of use.

iPods and MP3 players are ideal for taking your music with you, but they're not so good at letting you enjoy your music without headphones. For that you'll need at least a set of speakers; the rest is up to you.

Portable vs. Stationary

Portable speaker systems usually bundle the amplifier, speakers, controls, and power into a single package. Stationary systems usually have two or more separate speaker cabinets, in many cases with a dedicated subwoofer.

Power Supply

Stationary speaker systems almost always use an AC power supply; portable models may be battery-only, battery and AC, or AC-only. Battery-only models can be very inexpensive, but the cost of multiple sets of replacement batteries will eventually offset that advantage.

Connections

The most common method of connecting a music player and speakers is a 3.5mm (1/8-inch) audio jack, which connects the player's headphone output to the speaker system's input jack.

A dock is a better connection method. Docks come in many different forms; the most common is a universal iPod dock. Docks make all the necessary connections to the speakers at once and provide a secure home for your iPod. Many docks also provide power and recharging.

The Altec Lansing T612 ($199.95; www.alteclansing.com) is a portable speaker system that includes a dock for an iPod and a wireless remote.

Controls

Elaborate control systems mimic the controls on a music player. Simple control systems may be limited to power and volume up/down. Some systems include a wireless remote for controlling everything from across the room.

Amplifier Power

Some manufacturers love to spotlight specs. We go by the listen test instead. Does the system play at the volume levels we want, in a clear and crisp fashion, with minimal distortion? If so, that's pretty much all we need to know.

Speakers

Single speaker systems tend to have lackluster low ends. Systems that use two or more speakers per channel increase sound fidelity. One approach has a woofer for the low end and a tweeter for the high end; the other has two identical-sized speakers that, when playing low-end notes, together behave as if they were one larger speaker.

Satellite systems use at least three speakers; at least one for each channel and one woofer/subwoofer shared by both channels. The advantage is better low-end reproduction without excessively large speaker systems.

Let Your Ears Judge

Quality products are available in every price range. When shopping, bring your music player and a selection of favorite tunes along to audition the systems.

by Tom Nelson and Mary O'Connor

What You Get For The Money

Adequate ($20 to $69). Speakers in this range provide decent sound reproduction, as long as you're not trying to fill a large room. Bass response will be limited, but at reasonable levels, music shouldn't be distorted. Most systems will be single speaker per channel, with some multispeaker systems at the higher end of the price range. Controls are basic, with some systems offering simple docking capabilities.

Above-average ($70 to $149). Speakers in this price range offer good bass reproduction, clean high end, and the ability to fill a small room with good-quality sound. This range includes all three types of systems (single speaker, multispeaker, satellite). Portable models offer a docking system with recharging capabilities. Systems have full-feature controls, with basic remote capabilities at the high end.

High-quality ($150 and above). At this level, you move into a high-fidelity environment. Systems will be physically larger, with multispeaker and satellite systems the norm. Bass reproduction should be clean, without any excessive distortion. You should be able to fill a large room with high-quality sound. Systems include docking capabilities and full-feature controls; many also include a remote control. ●

Encrypt That Notebook

How Full Disk Encryption Helps Businesses

The Seagate Momentus product line of hard disk drives for notebook systems offers built-in FDE (full-disk encryption).

In the 2008 CSI Computer Crime and Security Survey, 42% of respondents said they had experienced the theft of a mobile device or notebook computer. Today's regulatory climate and corporate governance requirements, together with a more mobile workforce, mean that businesses must take measures to protect the sensitive information stored on their notebook computers.

FDE (full-disk encryption) secures hard drives and data by making all of the information stored on the drive unreadable to unauthorized users. Encryption is performed using highly complex formulas, or algorithms, that an attacker cannot crack. Unlike methods that encrypt only specific files or folders, a notebook using FDE offers far more protection from compromise. FDE locks down all of the hard drive's data, so the drive is protected even if an attacker attempts to copy files from it, remove the hard drive and place it in another machine, or read bootup information.

To access a system using FDE, you need to provide a secure password. For even more security, most systems offer two-factor authentication, which combines a password with other means of identification, such as a fingerprint scan or a smart card. After you provide the required credentials, encryption and decryption occurs in the background.

You can use software or hardware solutions to protect your notebook with FDE. Both options are available today, with hardware-based solutions gaining popularity. The solution you choose depends on your existing security solutions and policies, and need for encrypting a new or existing notebook.

FDE Software Options

You can find FDE software in security suites, standalone programs, and built into OSes. If your business is already using an integrated security suite with centralized management, you may be able to add an FDE utility to your existing configuration. For example, McAfee Endpoint Encryption, Symantec Endpoint Encryption, and PGP Desktop Professional include features that let businesses enforce security and encryption policies as part of an overall security solution.

If you are looking for a standalone option, you can install products such as PGP Whole Disk Encryption or the free open-source TrueCrypt encryption software on your existing notebook. After installation, you configure authorization via a password and/or additional means of authentication. The software then encrypts the contents of your hard drive, and it continues to perform encryption as you carry out your everyday tasks.

For notebooks running the Enterprise or Ultimate versions of Windows Vista, FDE software called BitLocker is included. BitLocker also allows businesses to centralize management using Active Directory and group policies. The forthcoming Windows 7 OS includes BitLocker, and it is slated to come with a version called BitLocker To Go for portable devices such as USB drives.

Self-Encrypting Drives

In January, the Trusted Computing Group and major hard drive manufacturers released the Opal specification for data protection. The specification includes FDE so that the drives are self-encrypting, and it standardizes methods for completely erasing the drive and preventing hackers and thieves from uncovering sensitive data. Seagate, Hitachi, and Fujitsu are currently manufacturing FDE hardware using the Opal specification; a number of business-class notebooks from Dell, Lenovo, and others now offer options for hard drives with built-in FDE.

As the Opal specification is more widely adopted by drive manufacturers, and data protection enforcement by businesses and government systems, the majority of notebook systems for business users will likely include self-encrypting hard drives.

Protect Your Business

Here are some key considerations regarding a self-encrypting hard drive: You cannot turn it off by accident, it runs faster than most software solutions, and it requires little or no maintenance.

by Carmen Carmack

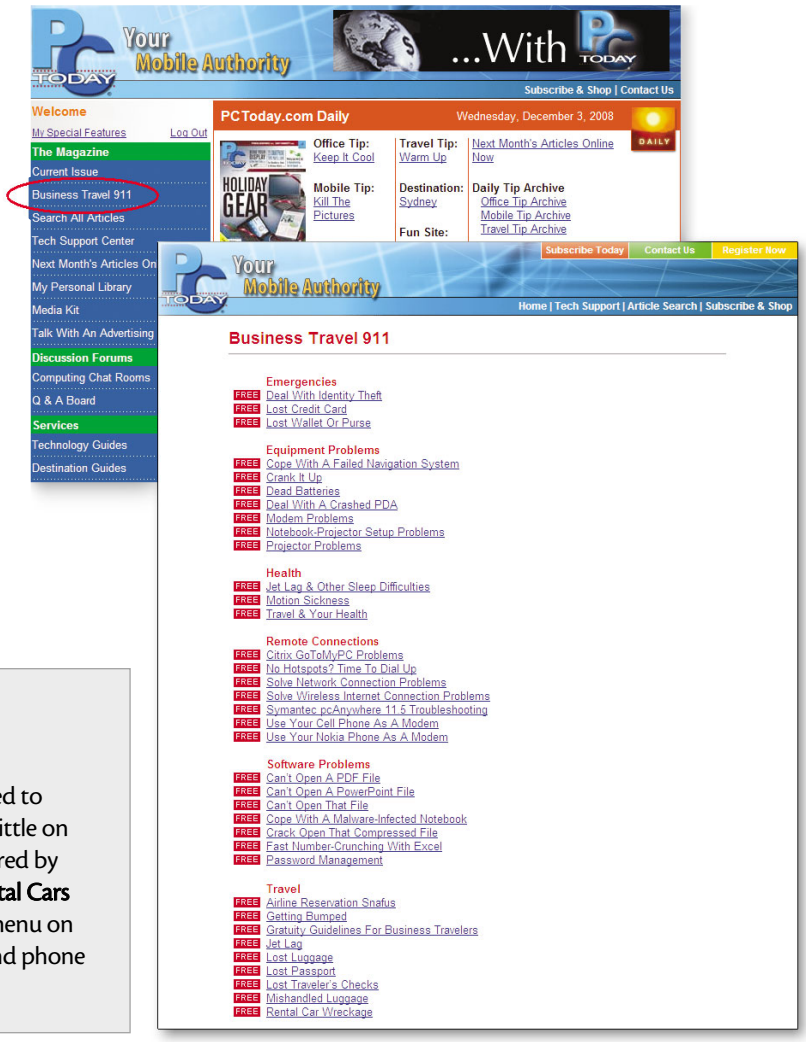
Business Travel Emergency

Unexpected things happen when you're traveling. You lose the ability to access the corporate network. A customer sends you an important file, but you can't open it. Your PDA crashes. Batteries die. Credit cards get stolen or lost. If these or other urgent situations happen to you when you're on the road, our Business Travel 911 articles can help.

Business Travel 911 articles are available to anyone with Internet access, even if you don't subscribe to *PC Today* magazine. Simply point a browser to www.pctoday.com and click the Business Travel 911 link on the left for a complete menu of helpful articles.

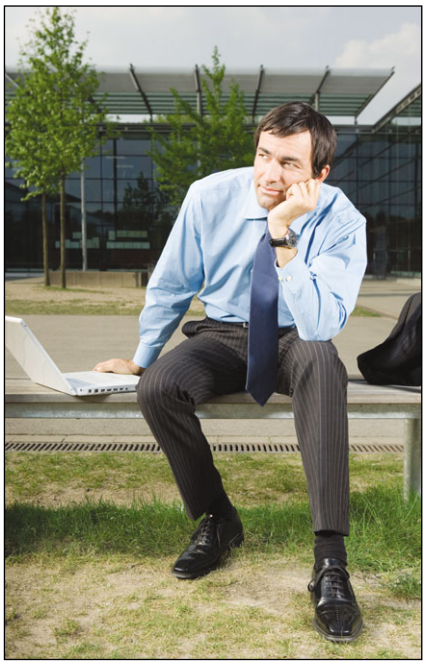
Business Travel 911 articles, including online versions of those printed on the following pages, are updated regularly. For articles that help you when you can't access the Internet, we suggest you print and take them with you when traveling. If you're a subscriber and you logged in on the home page, you can use the Print This link at the top of any article for a printer-friendly version.

While you're visiting the site, also check out the links under Services. There you'll find an abundance of domestic and international travel resources, including airline, airport, hotel, and vehicle rental information.



GET MORE ANSWERS

PCToday.com also offers numerous resources designed to make life easier for business travelers. Scroll down a little on the home page to find our **Wi-Fi Hotspot Locator**, powered by JiWire. Or check out the **Search For Flights, Hotels & Rental Cars** box to start making your travel plans. And the **Services** menu on the left side of the home page offers links to Web sites and phone numbers for airlines, airports, hotel chains, and more.



Need Help Right Now?

If you don't find the help you need in the Business Travel 911 department in this issue or on PCToday.com, visit our online Tech Support Center at www.pctoday.com/techsupport.

Search Or Browse

You can look for answers first by entering a search term in the search box toward the top of the page and clicking the Search button. You can also browse the list of Top Subjects to find answers to common problems or click the link under Solutions Knowledgebase to browse a list of common problems and frequently asked questions.

Fight Error Messages & Bugs

Click the appropriate link under Error Messages to find out what a particular message means. Or scroll down to Security & Privacy to learn how to tackle malicious software (such as viruses and worms), spyware, and spam.

Learn More

At the Tech Support Center, you'll also find links to troubleshooting articles on a variety of topics. Browse the headings on the main page to find a wealth of additional information, such as advice on setting up a wireless network and installing just about anything.

Exclusive Phone Number For *PC Today* Readers

If you don't find what you're looking for on *PC Today*'s online Tech Support Center, dial **(800) 414-3491** for assistance. Representatives are available from 8 a.m. to 8 p.m. CST Monday through Friday to take your call. You may also click the Email Us link under the heading "Still Can't Find A Solution?" at www.pctoday.com/techsupport.

(800) 414-3491

Revive A Crashed NOTEBOOK

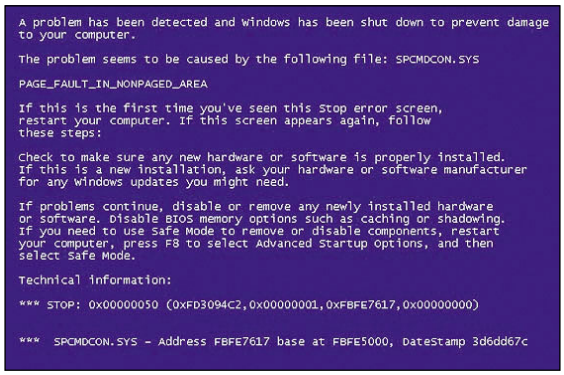
Someday you will face the inevitable notebook failure. You'll be working diligently on the documents you need for your three o'clock meeting or be right in the middle of composing a lengthy email describing the highlights of your previous business trip, and your Windows notebook will freeze, suddenly shut down, or reboot itself. Perhaps when you try to put work away for the night, your computer won't shut off, or maybe your evening Web browsing is halted by an unexpected blue screen bearing an ominously lengthy error message.

No matter the outcome, notebook malfunctions are inevitable and unavoidable (not to mention frustrating). Unfortunately, the common errors listed above could be the result of several different issues, so it can be difficult to pinpoint the cause of a failure. But luckily there are also many common solutions that often yield positive results. Next time your notebook experiences an error, remember these tips.

by Kris Glaser

NOTEBOOK WITH A BLUE SCREEN

If you haven't experienced the infamous BSOD (blue screen of death), you've probably heard of it. The BSOD's cryptic error message can make it difficult to determine the origin of a problem. But the BSOD, also called a stop error, is actually a safeguard for your notebook. When Windows detects a serious problem, it stops what it's doing and reverts to a blue screen to protect your operating system from damage. Most often, Windows will display a blue screen error when there is a hardware issue or when there is a conflict with device drivers. It doesn't always mean serious trouble, but it certainly slows you down; for example, an attached external hard drive that was turned on before the notebook powered up may cause a blue screen at startup, in which case you have to wait as Windows scans the external hard drive before completing startup.



The BSOD (blue screen of death) is actually a protection tool for your notebook's Windows operating system.

Restarting the notebook will often solve the issue. However, if a particular BSOD error appears repeatedly, write down the stop error message, such as "STOP: 0x0000007E." This will tell you which error has occurred so you can investigate a solution. If you search for the stop error code at Microsoft Help And Support (support.microsoft.com), you'll likely find an explanation and solution to your problem.

SPONTANEOUS REBOOT OR SHUTDOWN

Without warning, your notebook may reboot itself or shut down completely. Although a number of different issues could be the cause, there are three common possibilities. First, if you or your IT staff upgraded the hardware in your notebook, some components may be incompatible, causing the system to shut down to avoid damage. If you are experienced in notebook components or have an IT department to do this for you, you may try removing or replacing a newly installed component to see if the shutdown error persists. If you are certain that the failure is not hardware-related, check to make sure that the air intake fans are not impeded or blocked with dust or debris. Blocked fans decrease the amount of cool airflow into your notebook, and if the computer gets too hot, it will shut itself down as a precautionary measure to prevent component damage.

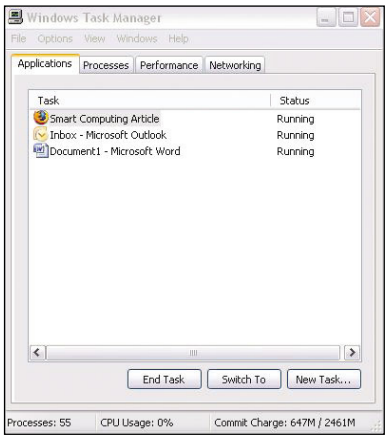
Automatic reboots or shutdowns could also be the result of a virus. If you have an antivirus program installed on your notebook, make sure it is up-to-date and then run a full scan of the hard drive. If you don't have an antivirus program, buy one or download a free program such as AVG Free Anti-Virus (free.avg.com). Once your antivirus program is ready to go, run a full scan to search for any malware. The antivirus program may find several issues, and hopefully the shutdown culprit will be one of them. When the scan is complete, follow the program's instructions to remove or quarantine any discovered malware.

FROZEN **NOTEBOOK**

You're undoubtedly familiar with this scenario: Things are going fine with your notebook when suddenly you can't switch between multiple applications or a program hangs when you try to open it. The mouse and keyboard may or may not respond, and you usually have to restart the computer, which is an inconvenience that can turn into a disaster if you haven't saved your work.

Freezes are commonly the result of memory overload. The memory in your notebook has a certain capacity, and if there are too many processes running simultaneously, your notebook may freeze because it can't keep up. Malware is a common culprit in causing freezes, and sometimes two programs in conflict with each other can freeze your computer, especially if the computer doesn't have sufficient processing power or memory. If the keyboard or mouse is responsive, start troubleshooting by pressing CTRL-ALT-DELETE. Enter the Task Manager and end the program you believe may have caused the freeze (usually the last you attempted to open). A problematic application name may be labeled "not responding," which helps you identify which program is causing the trouble. If the keyboard or mouse does not respond, you may have to perform a hard (aka cold) shutdown by holding down the power button for five to 10 seconds until your notebook turns off. When you start your notebook once again, chances are everything will run smoothly, as the freeze was the result of a memory overload.

If your notebook experiences frequent freezes, try the following suggestions. If the freeze occurs each time you open a specific program, make sure you have installed any updates or patches that the program might need. If a program is out-of-date, it may cause your notebook to freeze each time you open it because it is incompatible with another program or the OS. If a specific program doesn't seem to be causing the problem, try defragmenting your hard drive. Defragmenting combines fragmented files and cleans up your hard drive so that your notebook can access files faster. If it takes less effort to find and access files, your notebook will use a smaller amount of its memory capacity and thereby gain the ability to perform more actions simultaneously. Lastly, if your notebook still suffers from regular freezes, you may need to notify your IT department or, if the device is your personal notebook, research and purchase Registry-cleaning software, which cleans and fixes errors in the Windows Registry (the directory that saves all settings and options for the OS), or consider reinstalling the operating system.



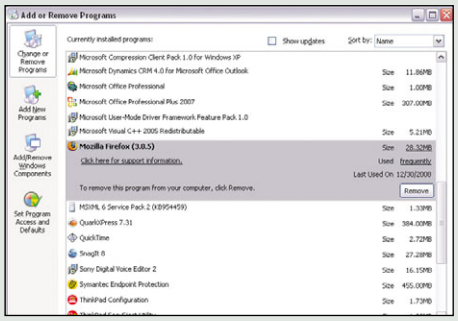
You can use the Task Manager to close a problematic program.

INABILITY TO **SHUT DOWN**

A notebook that won't turn off is just as aggravating as a notebook that turns off when it's not supposed to. This issue is often caused by a software (not hardware) error. A program may be unable to close, and because it's still running, Windows can't exit. If your notebook refuses to turn off each time you shut down, begin by determining which program might be causing the problem. Note any "end program" or "program not responding" messages or press CTRL-ALT-DELETE to check the Task Manager for programs running in the background.

If you recently made a change to that program, make sure that updates aren't available for the program. If there aren't any updates or the updates don't fix the problem, try using System Restore to return your computer to the state it was in prior to the change. To do this in Windows Vista, click Start, Control Panel, System And Maintenance, Backup And Restore Center, and Restore Computer; in Windows XP, click Start, All Programs, Accessories, System Tools, and System Restore. If the problem persists, you may have to remove the program altogether.

To uninstall a program in Vista, click Start, Control Panel, and Uninstall A Program to get started; in WinXP, click Start, Control Panel, and choose Add Or Remove Programs. Browse the list of programs for the application and choose Remove. Don't remove a program unless you have the executable file or the original installation discs on hand.



With the Add And Remove Programs feature in Windows, you can determine which program is causing an error by removing it and seeing if the problem is resolved.

BACK TO **NORMAL**

If your notebook problems persist, you'll obviously have to resort to consulting your IT staff, local computer repair store, or the manufacturer. But take heart: Unless your notebook has undergone extreme physical duress or your hard drive has become damaged, your data is most likely retrievable.

The Traveler's 911 Directory

HELP WHEN **YOU NEED IT**

No matter how hard we try, we can't ensure that our travel plans will always go smoothly. Thankfully, when things go wrong, help may be just a phone call away. Here's a list of phone numbers and Web addresses for airlines, car rental agencies, travel services, and hotels to assist you when your travel plans go awry.

AIRLINES

American Airlines
www.aa.com; mobile.aa.com
Reservations (800) 433-7300
TDD (800) 543-1586
Flight information (800) 223-5436
Baggage delayed less than five days (800) 535-5225
Ticket refund requests (918) 254-3777

Continental Airlines
www.continental.com
pda.continental.com
Reservations to U.S. and Mexico destinations (800) 523-3273
Reservations to international destinations (800) 231-0856
TDD (800) 343-9195
Flight information (800) 784-4444
Baggage information (800) 335-2247
OnePass frequent flyer assistance (713) 952-1630

Delta Air Lines
www.delta.com
mobile.delta.com
Reservations (800) 221-1212
Flight information (800) 325-1999
Baggage information (800) 325-8224
SkyMiles members (800) 323-2323

Frontier Airlines
www.frontierairlines.com
Reservations (800) 432-1359
Customer relations (800) 265-5505

JetBlue Airways
www.jetblue.com
mobile.jetblue.com
(800) 538-2583

Midwest Airlines
www.midwestairlines.com
Reservations (800) 452-2022
TDD (800) 872-3608

Northwest Airlines
www.nwa.com
wireless.nwa.com
Reservations (800) 225-2525
TDD (800) 328-2298
Flight information (800) 441-1818
Baggage information (800) 745-9798
Refunds (612) 726-2422
Post-date travel issues (701) 420-6282

Southwest Airlines
www.southwest.com
mobile.southwest.com
(800) 435-9792
TDD (800) 533-1305

Spirit Airlines
www.spiritair.com
(800) 772-7117

US Airways
www.usairways.com
Reservations to U.S. and Canada destinations (800) 428-4322
Reservations to international destinations (800) 622-1015
TDD (800) 245-2966
Customer service (800) 943-5436

United Airlines
www.united.com
www.ua2go.com
Reservations (800) 864-8331
International reservations (800) 538-2929
TDD (800) 323-0170

VEHICLE RENTALS

ACE Rent A Car
www.acerentacar.com
Assistance with an online booking (317) 248-5686

Advantage Rent A Car
www.advantage.com
Reservations (866) 661-2722 or (210) 344-4712 outside the U.S.
Customer service (800) 777-5524

Alamo Rent A Car
www.alamo.com
(800) 462-5266
TDD (800) 522-9292

Avis
www.avis.com
mobile.avis.com
Reservations (800) 331-1212
TDD (800) 331-2323
Customer service (800) 352-7900

Budget Rent A Car System
www.budget.com
mobile.budget.com
Reservations in the U.S. (800) 527-0700
Reservations outside the U.S. (800) 472-3325
TDD (800) 826-5510
Roadside assistance (800) 354-2847
Customer service (800) 214-6094

Dollar Rent A Car
www.dollar.com

Reservations (800) 800-3665
Reservations outside the U.S.
(800) 800-6000
TDD (800) 232-3301
24-hour roadside assistance
(800) 235-9393

Enterprise Rent-A-Car
www.enterprise.com
Reservations (800) 261-7331
TDD (866) 534-9270

Hertz
www.hertz.com
hertz.mobi
Reservations (800) 654-3131
Reservations outside the U.S.
(800) 654-3001
TDD (800) 654-2280
Extending a current rental
(800) 654-4174
Billing information
(800) 654-4173
Customer relations
(888) 777-6095

Holiday Cars
www.holidaycars.com
(800) 408-5370

National Car Rental
www.nationalcar.com
(800) 227-7368
TDD (800) 328-6323

Payless Car Rental
www.paylesscarrental.com
(800) 729-5377

Thrifty Car Rental
www.thrifty.com
Reservations (800) 847-4389
Emergency (877) 283-0898

TRAVEL SERVICES

AAA
www.aaa.com
aaa.mobi
Roadside assistance
(800) 222-4357

Expedia
www.expedia.com
(800) 397-3342

Hotwire
www.hotwire.com
(866) 468-9473
OCS (Overseas Citizens Services) traveler's hotline
(202) 647-5225 or (888) 407-4747
After-hours emergencies
(202) 647-4000

Orbitz
www.orbitz.com
mobile.orbitz.com
(888) 656-4546

Priceline
www.priceline.com
priceline.mobi
(800) 774-2354

Travelocity
www.travelocity.com
mobile.travelocity.com
(888) 872-8356

HOTELS

Candlewood Suites
www.candlewoodsuites.com
mobile.candlewoodsuites.com
(888) 226-3539

Chase Suite Hotels
www.woodfinsuitehotels.com
(800) 966-3346

Choice Hotels International
(Cambria Suites, Comfort Inn, Comfort Suites, Quality Inn, Sleep Inn, Clarion, MainStay Suites, Suburban Extended Stay Hotel, Econo Lodge, and Rodeway Inn)
www.choicehotels.com
(877) 424-6423

Courtyard Hotels
www.courtyard.com
courtyard.mobi
(888) 236-2427

Crowne Plaza Hotels & Resorts
www.crowneplaza.com
mobile.crowneplaza.com
(877) 227-6963

Doubletree Hotels
www.doubletree.com
doubletree.mobi
(800) 222-8733

Embassy Suites Hotels
www.embassysuites.com
embassysuites.mobi
(800) 362-2779

Four Seasons Hotels & Resorts
www.fourseasons.com
mobile.fourseasons.com
(800) 819-5053

Hampton Inn Hotels & Suites
www.hamptoninn.com
hamptoninn.mobi
(800) 426-7866

Hawthorn Suites
www.hawthorn.com
(800) 527-1133

Hilton Hotels
www.hilton.com
hilton.mobi
(800) 445-8667

Holiday Inn
www.holidayinn.com
mobile.holidayinn.com
(888) 465-4329

Holiday Inn Express
www.hiexpress.com
mobile.hiexpress.com
(888) 465-4329

Homewood Suites
www.homewoodsuites.com
homewoodsuites.mobi
(800) 225-5466

Hyatt Hotels & Resorts
www.hyatt.com
Hyatt Hotels & Resorts (888) 591-1234, TDD (800) 228-9548
Hyatt Place (888) 492-8847
Hyatt Summerfield Suites
(866) 974-9288

Marriott
www.marriott.com
marriott.mobi
(888) 236-2427

Radisson Hotels & Resorts
www.radisson.com
(888) 201-1718

Ramada Worldwide
www.ramada.com
(800) 272-6232

Renaissance Hotels & Resorts
www.renaissancehotel.com
(888) 236-2427

Residence Inn
www.residenceinn.com
residenceinn.mobi
(888) 236-2427

Ritz-Carlton Hotels & Resorts
www.ritzcarlton.com
(800) 542-8680

Sheraton Hotels & Resorts
www.sheraton.com
(800) 325-3535

Staybridge Suites
www.staybridge.com
mobile.staybridge.com
(877) 238-8889

Westin Hotels & Resorts
www.westin.com
(800) 937-8461

Wingate Inns
www.wingateinns.com
(800) 228-1000

Wyndham Hotels & Resorts
www.wyndham.com
(877) 999-3223

Woodfin Suite Hotels
www.woodfinsuitehotels.com
(800) 966-3346

The Business End

What's Ahead For Sprint, The Palm Pre & Sprint's Mobile Networks

In June, Sprint launched the new Palm Pre smartphone to favorable reviews and sales records. The phone is the first to use Palm's new Linux-based webOS operating system, and it features a touchscreen, slide-out keyboard, multimedia support, and more. Sprint has also been enhancing its 3G mobile network and expanding its 4G mobile network. To learn more about the Palm Pre and Sprint's mobile pursuits, we spoke with David Owens, director of product marketing for Sprint. Answers have been edited for space and clarity.

Q The Palm Pre received favorable reviews and set sales records for Sprint following the June release. What factors have contributed to the phone's initial success?

A The Palm Pre is designed to provide the ultimate Web-enabled experience, seamlessly integrating voice and data services. Together, the Palm Pre and Sprint are ideally suited as they leverage key differentiators, including America's most dependable 3G network, Simply Everything pricing plans—providing customers with substantial savings—and the Ready Now retail experience.

Sprint's Mobile Broadband Network reaches more than 270 million people, 18,600 cities, and 1,832 airports, providing more coverage than T-Mobile and AT&T. For customers who need unlimited voice, messaging, and data—including email, Web browsing, social networking, and GPS navigation—Sprint offers the Simply Everything plan for $99.99. That's a savings of more than $1,200 over two years vs. AT&T's comparable plan for the Apple iPhone. And Sprint launched Ready Now last fall, giving customers an opportunity to learn more about their wireless devices and help make sure they are fully satisfied with their purchasing decision.

Q What's different about the Palm Synergy feature and the Palm webOS platform as compared to what is available on other 3G phones?

A Palm webOS introduces Palm Synergy, which combines a personal and professional calendar, contacts, and email into one centralized location that maintains a logical separation, making transitions between work and personal life smooth and easy to manage. webOS users can run multiple applications at once and move easily among them. The new platform also features an unobtrusive notification system that easily integrates with applications, a physical keyboard, layered calendar and linked contacts, universal search, removable battery, better camera, and live television.

Q What are Sprint's Everything plans for the Palm Pre? How do they differ from Sprint's standard plans and other providers' plans?

A Sprint offers the best value in wireless for customers that really want to unleash the power of the Palm Pre without worrying about overages. Whether it is individual, family, or business (pooled plans) customers, Sprint will save customers a minimum of $115 to more than $1,000 annually. Individuals considering the iPhone, for example, who select an unlimited plan would save $600 a year vs. comparable AT&T plans.

There are three Everything Plans for individuals, three Everything Family/Share Plans, and a variety of Business Essentials Plans available for the Palm Pre.

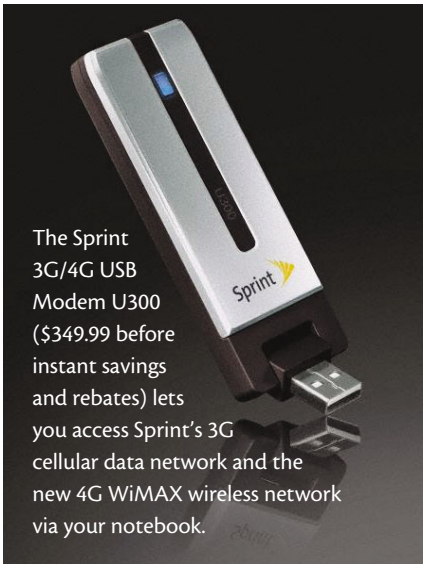
Q What applications and content are available for the Palm Pre?

A Our App Catalog is in beta right now. As with any new platform, it takes some time to build out, and Palm is busy working on a final version and engaging with a lot of great developers. Because the webOS platform is built on standard platforms, we expect the number of apps to

Sprint will save customers a minimum of $115 to more than $1,000 annually.

David Owens, director of product marketing for Sprint

The Palm Pre features the new Palm webOS platform, which lets you keep multiple applications open and move easily between them. You can move back and forth between text messaging and email or search the Web while you listen to music.



The Sprint 3G/4G USB Modem U300 ($349.99 before instant savings and rebates) lets you access Sprint's 3G cellular data network and the new 4G WiMAX wireless network via your notebook.

Palm Pre was available in June at Sprint stores, Best Buy, RadioShack, and select Walmart stores for $199.99 after rebate and with a two-year service agreement.

grow exponentially. Although the App Catalog is in Beta form, customers can still obtain numerous applications, such as LinkedIn, Pandora Radio, and Citysearch. And Sprint NASCAR Mobile, Sprint TV, and Sprint Navigation are available at no extra charge.

Q Does the Palm Pre offer specific features for business users?

A Many business users—some smaller businesses and some corporate users—have already adopted or upgraded to the Pre. In fact, 15 to 20% of the preorders for the Pre came from businesses, many registering an interest in upgrading from previous Palm devices such as the Treo.

The Pre offers many capabilities that are appealing for business users. For example, the webOS is an open and easy development environment for customers to integrate and build in their corporate applications. The Pre is easily supported by existing IT infrastructures such as Microsoft Exchange, without requiring additional middleware servers or expensive client access licenses. It also provides enterprise-grade security, including SSL and 128-bit encryption for Web communications, plus support for Wi-Fi access security and authentication. Palm Services, including remote wipe, backup, and restore of selected data, are all accessible directly by users from a self-serve Web portal, greatly reducing support costs for IT organizations.

Q What enhancements has Sprint made in its 3G network over the past few years?

A Since 2006, Sprint has invested almost $17 billion in capital, largely to enhance its wireline and wireless networks across the nation. While the Sprint 3G network is known for being the most dependable 3G network in the U.S., we continue to enhance and optimize our network performance to offer the best 3G experience for our customers.

Q What about the company's current and future 4G network?

A Sprint is currently the only major U.S. carrier offering 4G. The availability of Sprint 4G in Baltimore (with the nation's first 3G/4G USB Modem U300 device) delivers on our promise to offer an Internet experience faster than any other wireless service from a national carrier. Sprint 4G represents a shift in the way people will use mobile broadband. Businesses, consumers, and local governments are able to extend their Internet experience beyond home or office use.

Sprint 4G is currently available in Baltimore and is expected to be available in Portland, Ore.; Las Vegas; and Atlanta this summer. Other markets expected to launch later this year include Chicago; Charlotte, N.C.; Dallas/Ft. Worth; Honolulu; Philadelphia; and Seattle. In 2010, we expect Sprint 4G launch cities to include New York; Boston; Washington, D.C.; Houston; and the San Francisco Bay Area.

Q What is Sprint doing to enhance mobile communications for businesses?

A As the No. 1 wireless provider to businesses, Sprint allows its business customers to extend their workplaces, increasing worker productivity and lowering costs. In today's globalized world, business environments are changing dramatically, with the traditional office no longer being stationary. By 2011, as the mobile workforce continues to grow, many companies will migrate support to mobile phones as the primary mode of communication rather than using traditional desktop hardware. By replacing desktop phones with mobile devices, Sprint can help companies drive cost savings and promote efficiency, increasing the productivity of the mobile workforce.

For example, Sprint Mobile Integration allows businesses to make their employees more reachable by converging their desk phones and wireless phones, providing complete mobility and accessibility—in virtually any location. And since Sprint Mobile Integration leverages the existing premise-based PBX phone system, there are numerous ways to save on telecom expenses. To start with, all intra-enterprise calls, including calls to and from your mobile devices, are "on-net" and don't incur usage minutes. No other product in the market offers that level of convergence.

by Carmen Carmack

Happy Trails

by Tessa Warner Breneman

Intriguing Mobile Gear, New & Around The Bend

Multitask In Style

■ This luxury Bluetooth headset from Tag Heuer (www.tagheuer.com) is much more than a headset. It also serves as a USB flash storage drive, providing users 4GB of memory for storing all their important data. The flash drive also doubles as a charger for the headset, thus eliminating the need for yet another component to carry with you when you head out on your next business trip. This chic multifunction Bluetooth headset weighs in at just 40 grams and is made from hypoallergenic stainless steel and soft black rubber finishing, but Tag Heuer has kept mum on any other details, such as cost and availability.

The Tag Heuer luxury Bluetooth headset doubles as a 4GB USB flash drive and sports a chic design.

Look Good, Feel Good

■ There's a new phone in Motorola's lineup. The Moto W7 Active Editon is equipped with an accelerometer that lets you perform tasks with simple hand gestures such as flicks, taps, and shakes. The device also has a step pedometer coupled with a personal trainer application you can use to create a personal profile, set fitness goals, complete workouts, and view summary reports. If you need a little boost to your workout, the Moto W7 also has an MP3 player and FM radio. Motorola also offers stereo Bluetooth-enabled headphones (sold separately), so you can jam without being tethered to wires. With the Moto W7, you'll benefit from 3G speeds for a fast mobile Web experience. The phone also features two cameras: a 2MP camera for still images and a VGA camera for video calls. Motorola has not announced many other details except that it will release the phone in Asia and Latin America before making it available in the United States.

The Moto W7 Active Edition from Motorola offers gesture controls and apps you can use to keep your body in good health.

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